S0175-3

PRIORITY OF LIFE

1979 ANNUAL REPORT

ALABAMA DEPARTMENT OF PUBLIC HEALTH

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State of Alabama

DEPARTMENT OF PUBLIC HEALTH

State Office Building
Montgomery, Alabama 36130

IRA L. MYERS, M.D.
STATE HEALTH OFFICER

The Honorable Fob James
Governor of Alabama
State Capitol
Montgomery, Alabama 36130

Dear Governor James:

The Department of Public Health believes that the first priority of life is good health. Since the need for getting the most use from the tax dollar also has a high priority, prevention is the least costly method of ensuring good health for the citizens of Alabama. At the same time, however, our programs have not neglected the ill and infirm.

This report, reflecting our progress in 1979, presents the many and varied programs in the state and local health departments. Our continued objective is to provide quality health services to all Alabamians. We appreciate the support we have received from the Governor's office in reaching our goals.

Sincerely yours,

Ira L. Myers

Ira L. Myers, M.D.
State Health Officer

STATE COMMITTEE
OF
PUBLIC HEALTH

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Vice Chairman, Huntsville

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State Health Officer & Secretary

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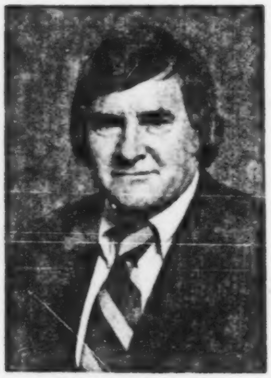
Birmingham

Ronald E. Henderson, M.D.
Birmingham

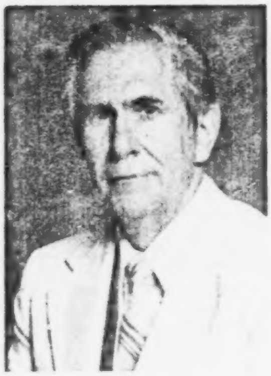
Vance Kane, D.M.D.
Demopolis



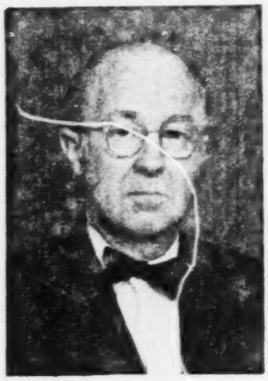
Charles M. Loftin, B.S.
Mobile

R. Ross McBryde, M.D.
Montgomery

John Hall Nelson, M.D.
Tuscaloosa



Ira B. Patton, M.D.
Oneonta



James A. Pittman, Jr., M.D.
Birmingham

L. M. Russell, D.V.M.
Montgomery

Aubrey E. Terry, M.D.
Russellville

Kenneth C. Yohn, M.D.
Eufaula

ADMINISTRATION AND BUREAU DIRECTORS

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Clinical Laboratory
Administration

Frederick S. Wolf, M.D.
Personal
Health Services Administration

Naseeb L. Shory, D.D.S., M.P.H.
Bureau of Dental Health

Anne M. Smith, M.S., R.N.
Bureau of
Public Health Nursing

Joyce Gendzwill, M.D.
Bureau of
Local Health Services

Grover Dick, M.A.
Bureau of Clinical Services

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State Health Officer
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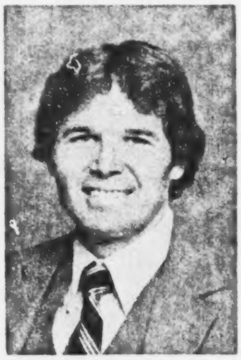
Special Services Administration

William T. Willis, M.S.
Environmental
Health Administration

Robert L. Goldenberg, M.D.
Bureau of
Maternal and Child Health



James J. McVay, M.P.A.
Bureau of
Primary Prevention

James D. Pate, M.B.A.
Bureau of
Health Data Systems

Tigner S. Zorn, B.S.
Bureau of Licensure
and Certification

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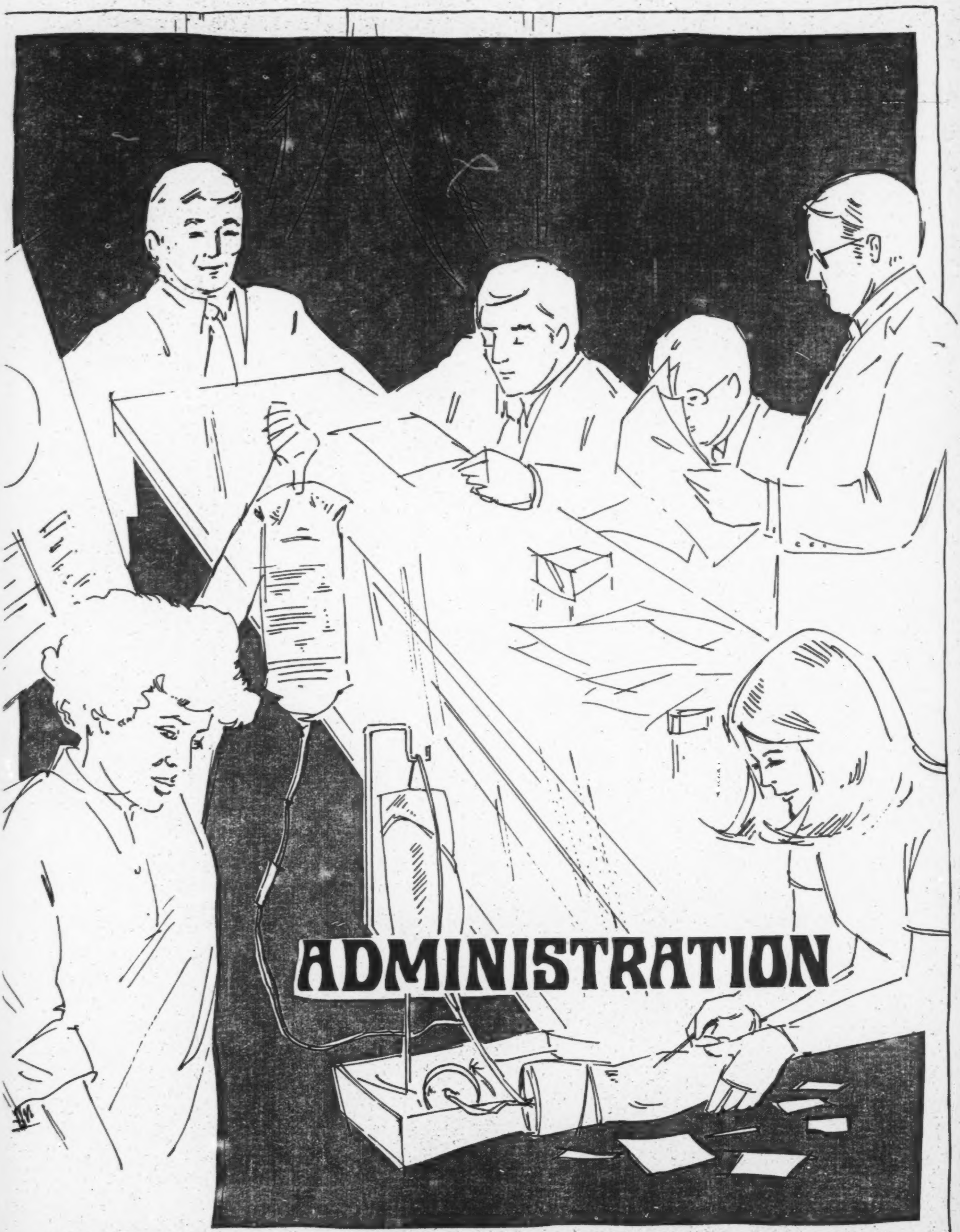

ADMINISTRATION

People, whether they realize it or not, set priorities in their lives. Government, like individuals, must also set priorities. The Alabama Department of Public Health believes that the first priority of life is good health. The need for getting the most use from the tax dollar also has a high priority.

During the year, the department has attempted to provide the best public health care while keeping within the budget assigned to it. The health department, like other departments in state government, has had to select priorities very carefully.

Tuberculosis is yielding to control measures in Alabama. Alabama's total mortality rate of 9.0 is close to the U.S. rate of 8.8. The cancer detection program was expanded this year. The hypertension program discovered and treated people who surely would have become incapacitated by high blood pressure.

Progress continues to be made in the field of public health. The health department is now expected to cope with more issues than sanitation and contagious diseases. As diseases are controlled or completely eradicated, priorities must change. But the primary priority will continue to be a long and healthy life for each Alabamian.

FINANCE DIVISION

INTERNAL AUDIT DIVISION

The Internal Audit Division in Administration is responsible for the internal auditing of all functions of the Alabama Department of Public Health.

This division also performed the following activities during 1979:

1. Represented the State Health Officer on auditing matters in meetings with the State Examiners of Public Accounts and auditors from various branches of the federal government.
2. Evaluated the audit impact of certain legislative actions and made recommendations pertaining to the legislative actions.
3. Monitored the Health Department's internal system which requires all contracts and agreements involving the Health Department to be sent to the Finance Division, Legal Division, State Health Officer and Internal Audit Division for review and approval prior to final execution of the contracts and agreements.

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE I
SUMMARY OF RECEIPTS, DISBURSEMENTS AND BALANCES BY SPECIFIC SOURCE OF FUNDS
FISCAL YEAR ENDING SEPTEMBER 30, 1979

Source	Balance 10-1-78	Receipts	Expended	Balance 9-30-79
STATE AND REVENUE FUNDS				
General Fund—Health	87,350.73	11,087,422.72	10,828,212.97	346,560.48
ASETF Prenatal Transfer	195,992.40	144,000.00	232,823.88	107,168.52
Total	283,343.13	11,231,422.72	11,061,036.85	453,729.00
1¢ Cigarette Tax	470,113.44	1,332,912.79	1,615,658.91	187,367.32
2¢ Cigarette Tax	1,002,680.81	2,001,775.56	2,401,013.52	603,442.85
Water Improvement Fines	334,069.61	43,535.14	15,942.18	361,662.57
Air Pollution Fines	140,186.14	0 –	33,587.02	106,599.12
Hospital Licenses	21,442.46	68,423.00	64,905.06	24,960.40
Vital Statistics Fees	248,441.61	629,482.00	752,650.43	125,273.87
Emergency Medical Services	18,428.47	67,671.00	23,746.18	62,353.29
Total	2,235,362.54	4,143,800.18	4,907,503.30	1,471,659.42
Regulatory Boards				
Hearing Aid Dealers	24,329.54	6,095.00	4,150.25	26,274.29
Water Well Standards	37,437.57	36,400.00	41,626.93	32,210.64
Water Plant Operators	12,149.80	5,495.00	4,555.38	13,089.42
Registration of Sanitarians	15,787.23	2,558.00	587.33	17,757.90
Total	89,704.14	50,548.00	50,919.89	89,332.25
TOTAL STATE & REVENUE FUNDS	2,608,409.81	15,425,770.90	16,019,460.04	2,014,720.67
FEDERAL FUNDS				
Revenue Sharing				
Cancer Detection	447.76	0	– 0 –	447.76
Emergency Medical Services	21,866.67	0 -	10,136.13	11,730.54
Vital Statistics	3,034.08	0 -	– 0 –	3,034.08
Dental Health	1,582.16	- 0 -	- 0 –	1,582.16
Laboratory Construction	349,372.01	467,000.00	734,532.97	81,839.04
Environmental Lab Construction	3,021.31	1,200.00	2,600.35	1,620.96
Dialysis Research	71,099.33	- 0 -	71,099.33	- 0 -
Total	450,423.32	468,200.00	818,368.78	100,254.54
Family Planning				
Title X	117,481.13	[illegible]	[illegible]	57,714.00
Title XIX	182,311.46	317,842.68	[illegible]	23,983.25
Title XX	447,328.04	0	447,328.04	- 0 –
Training Grant	(2,009.95)	14,820.70	14,482.48	(1,671.93)
Patient Fees	33,224.76	294,881.56	58,513.68	269,592.64
Total	778,335.44	3,760,044.94	4,188,762.33	349,618.05
Maternal & Child Health				
Title V, Sec. A	97,977.90	2,158,700.00	2,066,091.82	190,586.08
Title V, Sec. B	77,958.63	2,457,000.00	2,525,122.31	9,836.32
Title V, Sec. MR	4,915.57	140,200.00	141,397.85	3,717.72
Improved Pregnancy Program	46,339.91	355,000.00	400,378.22	961.69
Third Party Participation	240,694.80	149,654.46	107,832.00	282,517.26
Total	467,886.81	5,260,554.46	5,240,822.20	487,619.07
Environmental Protection Agency				
Water Improvement - 106	27,846.22	1,463,262.00	1,435,187.24	55,920.98
Water Improvement - 208	34,302.55	50,000.00	72,715.74	11,586.81
Water Improvement - Carry Over	1,602.04	11,700.00	11,602.04	1,700.00
Water Improvement – Earned Fund	82,818.45	1,105.00	424.51	83,498.94
Water Improvement - Surface Impound	9,703.45	75,000.00	74,850.77	9,852.68
Total Water Improvement	156,272.71	1,601,067.00	1,594,780.30	162,559.41
Air Pollution	54,936.61	780,325.00	755,314.03	79,947.58
Safe Drinking Water	52,727.24	589,191.00	515,902.40	126,015.84
Solid and Hazardous Waste	57,062.83	366,250.00	363,080.49	60,232.34
Total	320,999.39	3,336,833.00	3,229,077.22	428,755.17
U.S. Public Health Service				
Comprehensive Health – 314D	19,222.23	1,340,727.50	1,356,630.55	3,319.18
Hypertension	3,183.34	232,752.00	240,214.21	(4,278.87)
Planning and Development	61,734.56	317,112.22	378,274.49	572.29
Health Facilities	3,091.73	25,500.00	25,742.56	2,849.17
Health Manpower	925.65	67,300.00	66,231.45	1,994.20
Emergency Medical Services	97,963.07	930,500.00	1,024,577.37	3,885.70
Home Health	1,036.65	80,000.00	83,621.34	(2,584.69)
Hill Burton Administration	13,364.55	- 0 -	13,755.64	(391.09)
Hospital Construction	- 0	1,111,165.13	1,111,165.13	- 0 -
MCH—HIM	- 0 -	60,000.00	63,251.94	(3,251.94)
MCH—Sec. 330	- 0 -	13,250.00	12,500.00	750.00
Total	200,521.78	4,178,306.85	4,375,964.68	2,863.95
Center for Disease Control				
Venereal Disease	15,834.61	527,869.60	528,010.18	15,694.03
Immunization	4,609.19	202,500.00	212,466.83	(5,357.64)
Influenza	0 –	48,394.59	49,066.45	(671.86)
Lead Poisoning Control	724.69	– 0 –	(556.87)	1,281.56
Total	21,168.49	778,764.19	788,986.59	10,946.09
Appalachian Region Commission				
Northwest Health District	10,766.98	210,000.00	197,389.85	23,377.13
Emergency Medical Services - 1203	2,139.13	128,000.00	129,736.26	402.87
Home Health	1,922.03	– 0 –	619.61	1,302.42
Total	14,828.14	338,000.00	327,745.72	25,082.42
Other Federal Funds				
Dept. of Agriculture - WIC	204,407.14	11,050,000.00	10,886,217.34	368,189.80
AEC Radiological Health	217.47	10,044.04	1,391.79	8,869.72
NIH Cancer	742.82	– 0 –	(212.24)	955.06
SSA Certification	(73,041.23)	545,041.23	470,764.37	1,235.63
NCHS Vital Statistics	1,571.84	17,670.00	15,752.03	3,489.81
Home Health Escrow	335,692.43	(167,932.41)	- 0 –	167,760.02
Home Health Administration	– 0 –	210,665.00	108,355.14	102,309.86
Total	469,590.47	11,665,487.86	11,482,268.43	652,809.90
TOTAL FEDERAL FUNDS	2,723,753.84	29,786,191.30	30,451,995.95	2,057,949.19
LOCAL & MISCELLANEOUS FUNDS				
Developmental Disabilities	20,165.60	84,881.03	84,881.03	20,165.60
Dental Contracts	19,944.15	33,794.38	34,787.03	18,951.50
VD Dallas County	478.11	- 0 –	– 0 –	478.11
Environmental Laboratory	1,419.70	112,000.00	113,150.45	269.25
Health Data Grant	35,383.89	- 0 –	25,312.27	10,071.62
Indirect Cost Earned	1,028,415.79	1,553,459.11	1,408,717.17	1,173,157.73
Laboratory - Sickle Cell	38,165.00	68,493.35	29,800.11	76,858.33
Vital Statistics Services	26,233.46	39,704.36	8,957.54	56,980.28
Contract Safe Water Lab	17,943.10	30,000.00	24,677.59	23,265.51
Lab Training	1,650.00	100.00	855.70	894.30
Lab Rubella	– 0 –	3,300.00	- 0 –	3,300.00
Miscellaneous Reimbursement	169,441.24	456,712.82	743,751.56	(117,597.50)
Local Appropriations	2,715,512.83	22,091,252.55*	22,366,906.48*	2,439,858.90
State Health Planning & Development	– 0 -	201,000.00	51,595.68	149,404.32**
TOTAL LOCAL & MISCELLANEOUS FUNDS	4,074,752.96	24,674,697.60	24,893,392.61	3,856,057.95
GRAND TOTAL	9,406,916.61	69,886,659.80	71,364,848.60	7,928,727.81

*Includes 13,633,931.23 in funds collected and expended locally

**Transferred to Governor's office

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE II
SUMMARY OF PROGRAM DISBURSEMENTS BY GENERAL SOURCE OF FUNDS
FISCAL YEAR ENDING SEPTEMBER 30, 1979

	All Funds	State & Revenue Funds	Federal Funds	Local & Other Funds
ADMINISTRATION				
Executive	279,859.22	251,925.16	– 0 –	27,934.06
General Services	1,638,846.95	1,007,143.46	11,175.94	620,527.56
Finance	382,531.01	381,421.29	765.00	344.72
Personnel	102,012.50	99,594.37	1,179.60	1,238.54
Health Data	562,462.28	277,944.09	– 0 –	284,518.19
Graphic Communication	201,175.59	– 0 –	– 0 –	201,175.59
Total	3,166,887.56	2,018,028.37	13,120.54	1,135,738.65
SPECIAL SERVICES				
Vital Statistics	777,573.89	752,770.27	15,752.03	9,051.59
Narcotics and Dangerous Drugs	127,033.41	127,033.41	– 0 –	– 0 –
Primary Prevention	229,913.83	229,913.83	– 0 –	– 0 –
Administration	49,328.46	49,328.46	– 0 –	– 0 –
Total	1,183,849.59	1,159,045.97	15,752.03	9,051.59
HEALTH SUPPORT SERVICES				
Local Health Services	147,859.99	147,489.24	– 0 –	370.75
Northwest Alabama—ARC	197,389.85	– 0 –	197,389.85	– 0 –
Public Health Nursing	313,720.87	200,885.21	108,355.14	4,480.52
Covington Home Health	47,601.41	– 0 –	47,601.41	– 0 –
Geneva Home Health	20,643.06	– 0 –	20,643.06	– 0 –
Sumter Home Health	14,051.63	– 0 –	14,051.63	– 0 –
Clinical Laboratories	3,387,560.98	1,809,783.66	1,182,823.81	394,953.51
Hypo-Thyroid Testing	72,776.44	72,776.44	– 0 –	– 0 –
Clinical Lab Construction	823,750.52	904.05	734,532.97	88,313.50
Total	5,025,354.75	2,231,838.60	2,305,397.87	488,118.28
PLANNING, DEVELOPMENT AND REGULATION				
State Health Planning & Dev. Agency	51,595.68	– 0 –	– 0 –	51,595.68
State Health Planning & Dev. Adm.	74,141.08	– 0 –	74,141.08	– 0 –
Health Planning	153,665.70	– 0 –	154,113.30	(447.60)
Health Manpower and Facilities	90,549.17	– 0 –	91,005.56	(456.39)
Health Development	400,373.85	139,603.91	183,241.57	77,528.37
Hospital Construction	1,196,046.16	– 0 –	1,111,165.13	84,881.03
Emergency Medical Services				
State Operations	185,950.97	93,285.06	69,832.53	22,833.38
District Implementation	1,094,617.23	– 0 –	1,094,617.23	– 0 –
Total EMS	1,280,568.20	93,285.06	1,164,449.76	22,833.38
Licensure and Certification	998,287.94	157,989.93	451,338.69	388,959.32
Total	4,245,227.78	390,878.90	3,229,455.09	624,893.79
ENVIRONMENTAL HEALTH				
Administration	91,086.29	91,086.29	– 0 –	– 0 –
Inspection Services	449,990.03	449,990.03	– 0 –	– 0 –
Radiological Health	241,857.66	228,699.94	1,391.79	11,765.93
General Sanitation	135,895.68	135,895.68	– 0 –	– 0 –
Solid Waste & Vector Control	421,833.55	84,926.12	336,907.43	– 0 –
Public Water Supplies	665,442.08	152,736.88	512,705.20	– 0 –
Environmental Laboratory	261,804.36	113,462.78	26,710.00	121,631.58
Air Pollution Control Commission	1,226,836.06	459,704.67	755,310.92	11,820.47
Water Improvement Commission	1,981,172.56	382,904.21	1,598,268.35	– 0 –
Environmental Lab Construction	6,890.34	136.00	2,600.35	4,153.99
Total	5,482,808.61	2,099,542.60	3,233,894.04	149,371.97
PREVENTABLE DISEASE				
Administration	239,585.98	187,217.71	– 0 –	52,368.27
Cancer	421,530.70	420,742.94	787.76	– 0 –
Hospital of Cancer Patients	154,267.65	154,267.65	– 0 –	– 0 –
Venereal Disease Control	802,489.83	273,767.05	528,010.18	712.60
Tuberculosis Control	1,635,608.90	1,635,608.90	– 0 –	– 0 –
Hospitalization of TB Patients	794,987.41	794,987.41	– 0 –	– 0 –
Hypertension	330,911.67	90,697.46	240,214.21	– 0 –
Immunization	449,888.95	184,210.05	265,678.90	– 0 –
Total	4,879,271.09	3,741,499.17	1,034,691.05	53,080.87
FAMILY HEALTH SUPPORT				
Family Planning	4,267,921.23	– 0 –	4,267,921.23	– 0 –
Women, Infants & Children Food	10,886,624.99	– 0 –	10,886,624.99	– 0 –
Maternal & Child Health Administration	1,269,549.14	232,823.88	1,005,287.06	31,438.20
Prenatal & Well Baby Clinics	264,705.63	240.00	264,465.63	– 0 –
Mental Retardation Program	219,876.97	– 0 –	219,876.97	– 0 –
Maternal & Infant Care	1,608,095.26	– 0 –	1,608,095.26	– 0 –
Children & Youth Program	905,694.28	– 0 –	905,694.28	– 0 –
Intensive Infant Care	184,912.10	– 0 –	184,912.10	– 0 –
Special Dental Projects	97,379.07	– 0 –	97,379.07	– 0 –
Improved Pregnancy Outcome	310,748.67	– 0 –	310,748.67	– 0 –
Perinatal Program	42,647.37	– 0 –	42,647.37	– 0 –
Comprehensive Health Care	12,500.00	– 0 –	12,500.00	– 0 –
Total MCH	4,916,108.49	233,063.88	4,651,606.41	31,438.20
Dental Health	308,423.81	187,867.66	85,763.37	34,792.78
Total	20,379,078.52	420,931.54	19,891,916.00	66,230.98
REGULATORY BOARDS				
Hearing Aid Board	4,150.25	4,150.25	– 0 –	– 0 –
Water Well Standards Board	41,626.93	41,626.93	– 0 –	– 0 –
Cert. of Water Plant Operations	4,555.38	4,555.38	– 0 –	– 0 –
Registration of Sanitarians	587.33	587.33	– 0 –	– 0 –
Total	50,919.89	50,919.89	– 0 –	– 0 –
OTHER HEALTH SERVICES				
Dialysis Project	71,099.33	– 0 –	71,099.33	– 0 –
Total	71,099.33	– 0 –	71,099.33	– 0 –
LOCAL HEALTH UNITS	26,930,351.48	3,906,775.00	656,670.00	22,366,906.48*
GRAND TOTAL	71,364,848.60	16,019,460.04	30,451,995.95	24,893,392.61

*Includes 11,633,931.23 in funds collected and expended locally.

INTOXICATION STANDARDS
(Testing and Control)

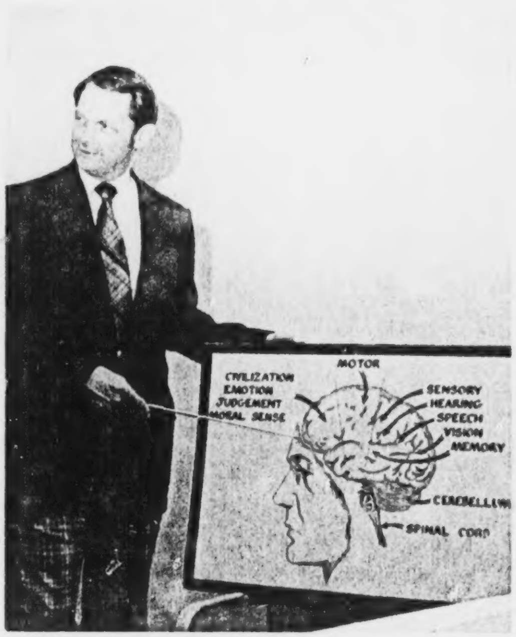
The Intoxication Standards (Testing and Control) Unit is responsible for the administration of the State Board of Health's responsibility as outlined in the Chemical Test for Intoxication Act (Implied Consent) enacted by the 1969 Legislature. This act was passed when the legislature recognized that some 65% of the motor vehicle operators that were fatally injured in traffic accidents were drinking to some degree, while 63% had enough alcohol in their blood to impair their brain to the degree that they were not safe to operate a motor vehicle. This percentage reflects a death rate ranging from 600 to 700 highway deaths annually in which alcohol is involved. The implementation of the Chemical Test for Intoxication program made available to law enforcement agencies testing equipment that would identify brain impairment by measuring the blood alcohol present. The amount of alcohol in the circulating blood of an individual determines the degree that a brain is impaired.

Alcohol is a drug; it is a depressant which slows down one's ability to perform and ultimately will deter rapid and timely decisions to prevent accidents within traffic situations.

The State Board of Health is charged with the approval of testing equipment, methods, procedures, and certification of the personnel conducting the analyses to determine blood alcohol levels. When discharging this responsibility, the State Board of Health must make available to the various agencies and the court system support testimony upon which decisions are based. This testimony further provides verification of actions by the board as it relates to particular questions pending before that court.

The certification of operators is another main function of the State Board of Health. With the certification is the support of the operators' qualifications to administer tests and the assurance that they are properly trained and will maintain the degree of competency and certain standards. It is the responsibility of the department to continuously monitor the training program previously approved by the Board of Health to make sure that each operator receives the proper training and meets certain standards and requirements prior to certification. Once the certification has been issued, in order to maintain the certification, the operator is required to attend training sessions held twice a year. Failure to meet the requirements results in suspension of that certification until the required training has been acquired. At the close of 1979, there were 3,159 instrument operators trained to administer breath tests utilizing approved instruments. In addition to the certification of the law enforcement personnel administering breath tests to determine blood alcohol levels, the department is also charged with the responsibility of certifying laboratory personnel who analyze blood and urine specimens. The certification is based on education, qualifications, and experience.

The cost of driving while intoxicated is tremendous and is a useless act that must be controlled through strict law enforcement.



LEGAL DIVISION

Activities of the Office of Legal Counsel for 1979 are divided into three main categories—litigation, administration and advisory.

During the year the office continued to represent the State Board of Health, the State Health Officer, the Department of Public Health and various county boards of health, health departments and personnel as well as independent boards. Areas of litigation involved the environment, WIC Program, Vital Statistics, Laboratory, Health Planning, Building Commission and Board of Adjustment.

Environmental cases included three solid waste cases—*State Board of Health v. Woodham,* and *State Board of Health v. Sam Story,* actions to close illegal dumps; *State Board of Health v. Marion County Commission,* an action to require the upgrading of the Marion County landfill. Several other actions are being prepared for filing against certain individuals and county governments who are in noncompliance with the Solid Waste Disposal Act.

Environmental litigation also involved subdivision sewage disposal cases—*Greater Birmingham Association of Homebuilders v. State Board of Health,* an action to determine the constitutionality of an Act giving complete control of subdivision regulation in Jefferson County to the Jefferson County Board of Health, now on appeal to the Supreme

Court; *Kaemmerer v. State of Alabama Department of Public Health and Baldwin County Board of Health,* an action to compel the boards to issue septic tank permits; *Atnip Design and Supply Co. v. State of Alabama Board of Health, et al,* an action to require the board to approve a previously disapproved tract of land for use with septic tanks, now on appeal to the Supreme Court; and *Huntland Ltd. v. Charlie Kornegay,* further proceedings in a sub-division action which goes back to 1975.

In *Wimbley v. Bergman,* in which the State Board of Health is a defendant, plaintiffs have sough to require the State Board of Health to institute the WIC Program in all counties and to allow the corporate plaintiff to be the dispensing agent for vouchers in Lee County. This action has become quite protracted.

The office defended one Vital Statistics case in 1979—*All Natural Persons v. State Board of Health,* an action to have declared unconstitutional the requirement of certain information on statistical divorce record forms. The court found in favor of the Board of Health.

Staff attorneys have been involved quite extensively in the taking of depositions of parties and nonparties in matters to which the Board of Health, department and its personnel are parties and in some matters in which department personnel were used merely as expert witnesses.

In *McKee v. Matthews, et al,* an action filed by a discharged employee of the Anniston Laboratory, the Board of Health's attorneys are currently defending claims for damages made against the laboratory, its local director and the director of the Clinical Laboratory Administration.

Robinson v. Worthington, et al was an action for damages filed by a discontinued medicaid provider against the Medical Services Administration and the members of the State Committee of Public Health. Staff attorneys cooperated with private counsel in obtaining dismissal of the action on several grounds.

Attorneys from the office are currently defending in the Supreme Court a challenge to the State Health Planning and Nursing Home Licensure laws in *Mount Royal Towers, Inc. v. State Board of Health.*

Several cases were filed in the Montgomery County Circuit Court involving members of the Building Commission wherein the State Health Officer was named. In each case the court granted the dismissal of defendant Myers. Still pending before the Federal District Court is *Wyatt et al v. Bronner, et al; Fulton v. Bronner, et al; Allen v. Bronner et al; Adams and Martin v. Bronner, et al* and *Johnson v. Bronner, et al,* all dealing with dismissal of certain employees by the State Building Commission, of which the State Health Officer is an ex officio member.

In administrative proceedings, the Office of Legal Counsel has represented the State Commitee of Public Health in many Fair Hearings under the provisions of Section 1122 of the Social Security Act prior to SHPDA being placed under the control of the Governor. Staff attorneys also chaired the 1122 Project Review Committee prior to the departure of SHPDA.

In addition to its in-court and administrative duties, the Office of Legal Counsel has assisted in the writing and presentation of several sets of regulations dealing with a wide variety of subjects. In this regard, staff attorneys have served on numerous occasions as hearing officer for public hearings on regulations. Attorneys have assisted in the development of protocols for county health officers in suspected rabies cases and have assisted in obtaining several court orders for impoundment or destruction and examination of suspected rabid animals.

Attorneys have, as in the past, advised the State Committee of Public Health and other allied boards, including Alabama Water Well Standards Board, Board of Certification of Water and Wastewater System Personnel, Hazardous Waste Management Advisory Board and Board of Hearing Aid Examiners.

Staff attorneys have written formal and informal Attorney General Opinions and have served as consulting counsel in Attorney General matters to all administrations, bureaus, and offices within the Department of Public Health as well as county health departments.

The Office of Legal Counsel has been responsible for writing and serving several Orders of the State Health Officer dealing with public water supply, dairy products, shellfish and rabies.

The office has been charged with the responsibility of overseeing claims against the state and county health departments filed with the Board of Adjustment and has successfully represented the department in each.

The Office of Legal Counsel has been called upon to write or review contracts and leases entered into by any agency of the Department of Public Health during the year. In addition, attorneys mediate EEOC complaints against the department.

Staff counsel furnish on a day-to-day basis legal advice to staff members of the state and county health departments. Although a majority of the questions posed concern matters and interpretations of statutes and regulations, a substantial number of inquiries frequently involve a review and rewriting of correspondence as well as questions pertaining to proper administrative procedures.

The Office of Legal Counsel is responsible for taking appropriate action on all matters and correspondence as assigned by the State Health Officer.

PERSONNEL DIVISION

The importance of the clerical staff to Health Department functions has long been evident. In that regard, a series of workshops was conducted between July 17, 1979, and October 12, 1979, by Mrs. Sylvia Stamm, Consultant, for the clerical personnel's professional development. The sessions included proofreading, telephone etiquette, correct grammatical usage, letter format, punctuation and proper office appearance and behavior for presenting a professional image. Workshops were held in selected locations throughout the state for county personnel and in Montgomery for the state level staff. Each of the workshops proved to be a definite success due to the instructor's preparation and presentation as well as student participation. As a direct result of this comprehensive overview, more conscientious efforts are being made to produce quality work and to perform duties more efficiently.

An urgent need of the Health Department is to have employees who can direct and supervise administrative and support functions more effectively. Since the principal function of the Health Department is to provide quality care in the treatment of patients, it is imperative that these supervising individuals possess an educational background with predominant emphasis on certain disciplines. As a consequence, training in many aspects of management are often neglected.

Furthermore, the department has experienced a significant increase in grievances and appeals of actions affecting employees. It is believed that many of these complaints could be avoided if the immediate supervisors involved were better prepared to carry out their supervisory responsibilities. Action was initiated in 1979 to develop a supervisory training program. Data on supervisory training needs was obtained through a survey conducted by questionnaires mailed to departmental supervisors. This information was provided to the staff of the Department of Government, Auburn University at Montgomery, who developed the training module. Further, a contract was negotiated and approved by Governor Fob James on December 10, 1979, for six workshops to be conducted throughout the state for supervisors beginning January 16, 1980.

The primary objective of this supervisory training program is to improve managerial ability among professional, administrative and technical employees. These managerial skills include improvement in communications, human relations, organization, planning and control. Additionally it is expected that improved motivation will be realized by all persons as a direct or indirect result of these workshops.

During 1979 insufficient funding resulted in the closing of four branches of the State Laboratory. Some employees elected to retire, others were transferred, and some who wished not to transfer were laid off.

There were previously 3,628 positions in the department (2,078 county; 1,550 state). Of these positions, there were 1,235 positions that had not been filled and/or were not budgeted to be filled. These non-budgeted positions were abolished; however, 103 new positions were established.

Therefore there are currently 2,393 positions in the department (1,435 county; 958 state). Of these positions, 528 were reviewed during the year for proper classification by actual job studies and through the use of position questionnaires (333 county; 195 state), 23 positions were reclassified (20 county; three state). New classifications established included Nurse Practitioner I and II, Nurse Midwife I and II, Environmentalist VII, and Environmental Health Laboratory Director.

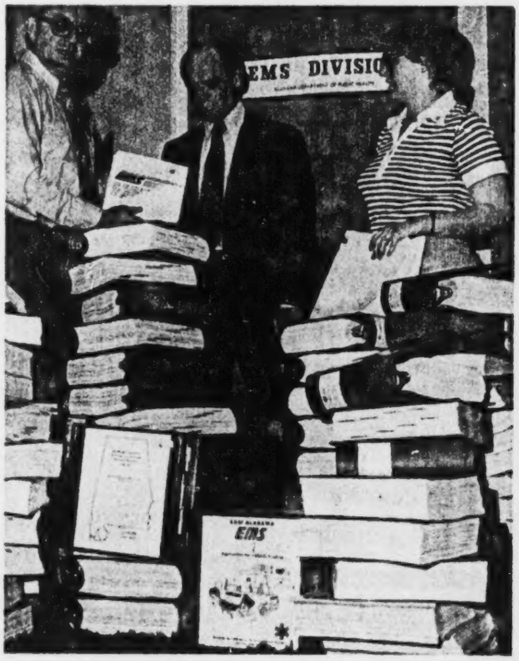
By the end of the year there were 850 state employees and 1,227 county employees on the payrolls. **Total combined accessions** of 375 consisted of 225 probationary, 75 provisional, nine temporary, 17 reemployment, 23 transfer, and 26 unskilled appointments.

Separations numbered 410, of which 196 were resignations, 48 were transfers, 100 expiration of appointments, 24 layoffs and nine dismissals. There were 32 retirements and one death during this period.

PLANS AND EVALUATION DIVISION

The division was established within the department's Bureau of Administration in August, 1979, to provide planning, evaluation and related administrative support for the department. Responsibility for the Statewide Emergency Medical Services Program was also assigned to the division.

The division conducted or coordinated the preparation of departmental reports and studies requested by the Legislature's Sunset Committee, the Governor's Office and other organizations. In the aftermath of Hurricane Frederic, the division staff served as the State Health Department's representative in the state's disaster assistance effort. Maintenance of the department's active participation in the

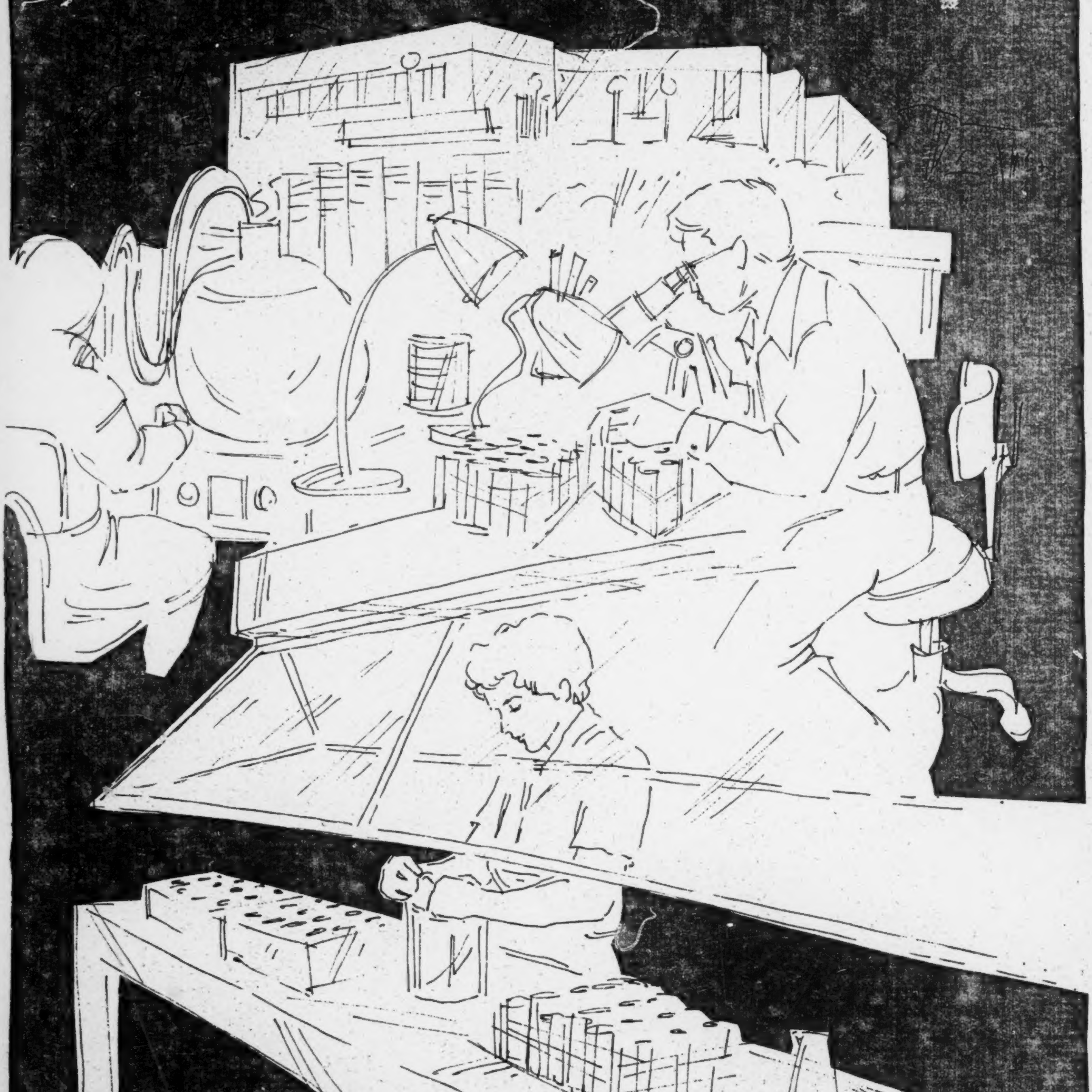


State Health Planning and Development Program was accomplished primarily through the division's planning and liaison activities. The division performed numerous administrative tasks for the department and supervised the state's Emergency Medical Services Program.

Emergency Medical Services Office

The EMS Office continued to conduct both regulatory and development functions. A total of 132 ambulance service operator licenses were issued, and 308 inspections made of ambulance vehicles. Individual licenses issued numbered 5,185, of which 3,400 were for Emergency Medical Technician—Basic. Emergency Medical Technician (EMT) tests were administered to 3,775 individuals, and over 1,000 EMTs were certified for relicensure following their participation in continuing education. The office coordinated the approval of 85 statewide continuing education programs. A total of 83 IV fluid/medication authorizations were issued. The EMS Office prepared five major funding applications, receiving four approvals, for a total of $2,483,660. The State received approval of four regional EMS applications, more than any other state in this Public Health Service Region. The State Emergency Medical Services Advisory Board continued to provide advice and support to the program. Adequate staffing and financing of the program is a major obstacle to the quantity and quality of program production. The staff consists of only nine members. Programs in sister states average 15 people, indicating the inadequacy of Alabama's staff.

CLINICAL LABORATORY ADMINISTRATION



A major restructure of the laboratory system occurred during fiscal year 1979. On October 1, the Clinical Laboratory Administration suffered a severe budgetary cut due to new HEW guidelines that would not allow 314(d) funds to be used for providing laboratory services. The loss of these funds which composed better than 95 percent of the budget for the eight branch laboratories, created an overwhelming deficit for both personnel and operational needs. Consequently, the laboratory was faced with the dilemma of closing branch laboratories, laying off personnel and reducing services.

The State Board of Health was advised of the situation and approved the action required to bring the laboratory within an operational budget. Branch laboratories in Anniston, Hunstville, Selma and Tuscaloosa were closed. A lay off list was developed by Health Personnel and 21 positions were eliminated. Lead testing, virus isolation, examination of venereal smears, Streptococcus primary isolations (throat cultures) and market oyster testing were discontinued for all health care providers. VDRL testing and enteric primary isolations were continued only for county health departments and state agencies.

To insure a smooth transition of services from areas affected by laboratory closings and provide a method to allow specimens to be received within mandated time limits, (i.e. milk, water and GC cultures) laboratory personnel developed a viable courier schedule. The courier system has proven to be economical, functional and a cost effective alternative for county health departments.

A four percent decrease in the total number of specimens received and a 5.2 percent decrese in the total number of examinations performed occurred as a result of the above program changes. However, some areas such as gonorrhea, mycology, PKU, hypothyroid and rabies demonstrated notable increases.

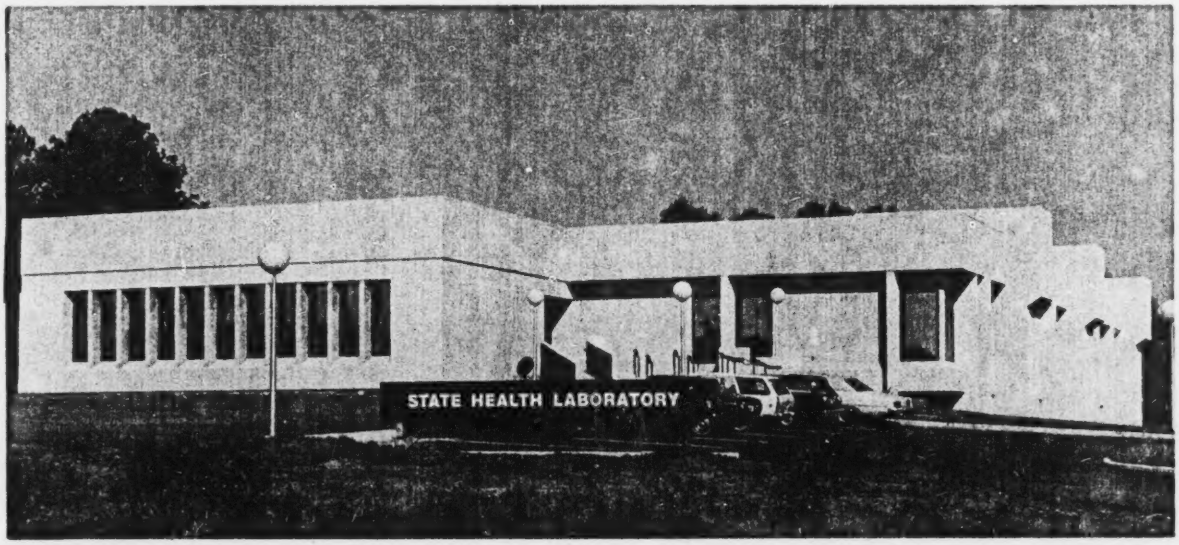
The rabies epizootic continued in southeastern counties and the disease is obviously spreading throughout the state. There were 73 rabid animals detected this year as compared to 53 cases in 1978. This represents a 138 percent increase in positives.

During the year 97,456 specimens were received for PKU testing and three positives were detected. These infants were referred to the Center for Childhood Disease and Learning Disorders for consultation and monitoring.

Act 79487 to Amend Section 22-20-3 of the Code of Alabama passed by the 1979 legislature requires that all infants 28 days old or less have a reliable test for hypothyroidism and phenylketonuria (PKU). The Act included an appropriation to allow the laboratory to implement a statewide T_4 screening program. Since this appropriation wasn't available until October 1, the implementation of a statewide program has been delayed. Time was needed to acquire and train personnel and to purchase the necessary equipment. Routine screening should begin in early 1980. To date the pilot neonatal screening program has detected 14 hypothyroid infants, ten of which were found this year.

Construction of a new Birmingham Branch Laboratory in the Jefferson County Health Department began in December. If progress continues at the present level the facility should be completed in March, 1980.

In July, the laboratory moved into its new facility located on the campus of Auburn University at Montgomery. The move was completed in two weeks and without interruption of services. This was accomplished by dedicatd laboratory employees who used their private vehicles and worked both nights and weekends. Dedication ceremonies are planned in the spring of 1980.



BACTERIOLOGY DIVISION

General Bacteriology

This department received 1,351 cultures for identification from private and hospital laboratories throughout the state. The 1,069 isoltions made were:

Acinetobacter calcoaceticus var. anitrautus	17
Acinetobacter calcoaceticus var. lwoffi	7
Actinobacillus actinomycetemcomitans	2
Actinomyces odontolyticis	4
Aerococcus species	1
Aeromonas hydrophila	3
Alcaligenes oderans	2
Bacillus species	40
Bacillus cereus	19
Bacillus pumilus	1
Bacteroides species	8
Bacteroides assachrolyticus	1
Bacteroides CDC Group F-1	1
Bacteroides corrodens	1
Bacteroides distasonis	7
Bacteroides fragilis	34
Bacteroides melaninogenicus	2
Bacteroides melaninogenicus	2
Bacteroides vulgatus	6
Bifidobacterium species	3
Bifidobacterium eriksonii	3
Bordetella bronchioseptica	1
Bordetella pertussis	1
Branhamella catarrhalis	9
Brucella abortus	3
Brucella suis	1
Campylobacter species	1
Citrobacter species	1
Citrobacter diversus	1
Citrobacter freundii	7
Clostridium species	8
Clostridium bifermentans	1
Clostridium cadaveris	1
Clostridium perfringens	40
Clostridium ramosum	1
Clostridium septicum	1
Clostridium sphenoides	2
Clostridium subterminale	1
Clostridium tertium	6
Corynebacterium species	34
Corynebacterium aquaticum	1
Corynebacterium CDC Group J-K	1
CDC Group V-E-2	1
CDC Group EF-11	1
CDC Group II-F	2
CDC Group EO-2 Unclassified	1
Eikenella corrodens (HB-1)	12
Enterobacter species	2
Enterobacter agglomerans	9
Enterobacter cloacae	6
Enterobacter aerogenes	1
Escherichia coli	33
Eubacterium lentum	5
Eubacterium alactolyticum	1
Flavobacterium meningosepticum	2
Fusobacterium species	1
Fusobacterium nucleatum	2
Hafnia alvei	5
Haemophilus aphrophilus	4
Haemophilus influenzae—unable to type	55
Haemophilus influenzae—type A	1
Haemophilus influenzae—type B	54
Haemophilus influenzaw—type C	1
Haemophilus influenzae—type D	5
Haemophilus influenzae—type E	3
Haemophilus influenzae—type F	2
Haemophilus parainfluenzae	22
Haemophilus parahemolyticus	3
Haemophilus vaginalis	13
HB-5	2
Klebsiella species	2
Klebsiella ozonae	1
Klebsiella pneumoniae	3
Lactobacillus species	14
Lactobacillus breuis	1
Listeria monocytogenes	8
Micrococcus species	2
Moraxella species	5
Moraxella non-liquefaciens	3
Moraxella osloensis	12
Moraxella phenylpyruvica	6
Moraxella urethralis	1
Morganella morganii	2
Neisseria gonorrhoeae	126
Neisseria lactamica	1
Neisseria meningitidis—unable to group	2
Neisseria meningitidis—Group A	6
Neisseria meningitidis—Group B	19
Neisseria meningitidis—Group C	2
Neisseria meningitidis—Slaterus Y	6
Neisseria meningitidis—W-135	1
Neisseria sicca	4
Neisseria subflava	5
Pasteurella multocida	5
Peptococcus species	7
Peptostreptococcus species	9
Peptostreptococcus CDC Group I	2
Peptosteptococcus CDC Group II	1
Peptostreptococcus CDC Group III	1

Peptostreptococcus CDC Group IV	2
Plesiomonas shigelloides	2
Propionibacterium species	11
Propionibacterium acnes	17
Propionibacterium granulosum	4
Proteus species	1
Proteus mirabalis	9
Proteus vulgaris	2
Providencia alcalifaciens	1
Providencia stuartii	2
Pseudomonas species	22
Pseudomonas aeruginosa	16
Pseudomonas alcaligenes	4
Pseudomonas cepacia	15
Pseudomonas fluorescens	2
Pseudomonas fluorescens Group (Ps. putida)	3
Pseudomonas maltophilia	6
Pseudomonas paucimabilis	2
Pseudomonas stutzeri complex	1
Pseudomonas stutzeri complex (Vb-3)	1
Salmonella species	1
Salmonella enteritidis—ser. Agona	1
Salmonella enteritidis—ser. Muenchen	1
Salmonella enteritidis—ser. Miami	1
Sarcina	3
Serratia species	2
Serratia liquefaciens	1
Serratia marcescens	2
Shigella flexneri—type 2	1
Staphylococcus—coagulase negative	20
Staphylococcus—coagulase positive	10
Streptococcus species	6
Streptococcus, Beta hemolytic—Group A	10
Streptococcus, Beta hemolytic—Group B	17
Streptococcus, Beta hemolytic—Group C	9
Streptococcus, Beta hemolytic—Group F	8
Streptococcus, Beta hemolytic—Group G	8
Streptococcus, Beta hemolytic— unable to group	3
Streptococcus—Group D (enterococcus)	11
Streptococcus—Group D (not enterococcus)	2
Streptococcus, viridans group, not group D	11
Streptococcus MG—intermedius	2
Streptococcus mitis	3
Streptococcus mutans	1
Streptococcus salivarius	1
Streptococcus sanguis—biotype I	1
Streptococcus sanguis—biotype II	2
Streptococcus pneumoniae—type 4	1
Streptococcus pneumoniae—type 10	2
Streptococcus pneumoniae—type 11	1
Streptococcus pneumoniae—type 12	2
Streptococcus pneumoniae—type 14	1
Streptococcus pneumoniae—type 15	1
Streptococcus pneumoniae—type 16	1
Streptococcus pneumoniae—type 19	1
Streptococcus pneumoniae—type 23	2
Streptococcus pneumoniae—type 33	2
Veillonella species	1
Veillonella alcalescens	1
Vibrio extorquens	1
Vibrio non-cholera	1
Organisms—unable to identify	14

These isolations required 30,057 biochemical, serological and animal tests.

In addition, 245 throat cultures were screened for diphtheria with one positive; 648 throat cultures were exmined for pathogenic staphylococci with 259 positives; and four serums were submitted for botulism toxin testing.

Enteric Bacteriology

From the 4,437 stool specimens and cultures received this year, 624 Salmonellas and 213 Shigella were identified and serotyped.

Salmonella isolations were:

Salmonella typhi	10
Salmonella cholerae— suis bioser Kunzendorf	5
Salmonella enteritidis serotype:	
typhimurium	187
newport	47
heidelberg	46
infantis	41
muenchen	39
javiana	25
mississippi (Atlanta)	23
bioser Java	18
saint Paul	18
oranienburg	15
agona	14
montevideo	13
muenster	9
blockley	8
bredeney	7
binza	7
adelaide	7
litchfield	7
derby	6
enteritidis	6
anatum	5
kottbus	4
berta	4
give	4
norwich	3
thompson	3
pensacola	3
ohio	3
duesseldorf	3

bioser Miama	3
san diego	3
albany	2
braenderup	2
indiana	2
schwarzengrund	2
siegburg	2
tennessee	2
bareilly	1
brazil	1
corvallis	1
bovismorbificans	1
hartford	1
Salmonella enteritidis serotype:	
havana	1
lagos	1
livingstone	1
manhatten	1
minnesota	1
molade	1
panama	1
poona	1
westhampton	1
uganda	1
Unable to serotype	1
Shigella Isolations:	
Shigella sonnei	184
Shigella flexneri	29

Primary isolation as a service to private physicians was discontinued in October, 1979. This section continues primary isolation work for public agencies, and confirmation and serotyping of isolates for private and hospital laboratories.

Rabies

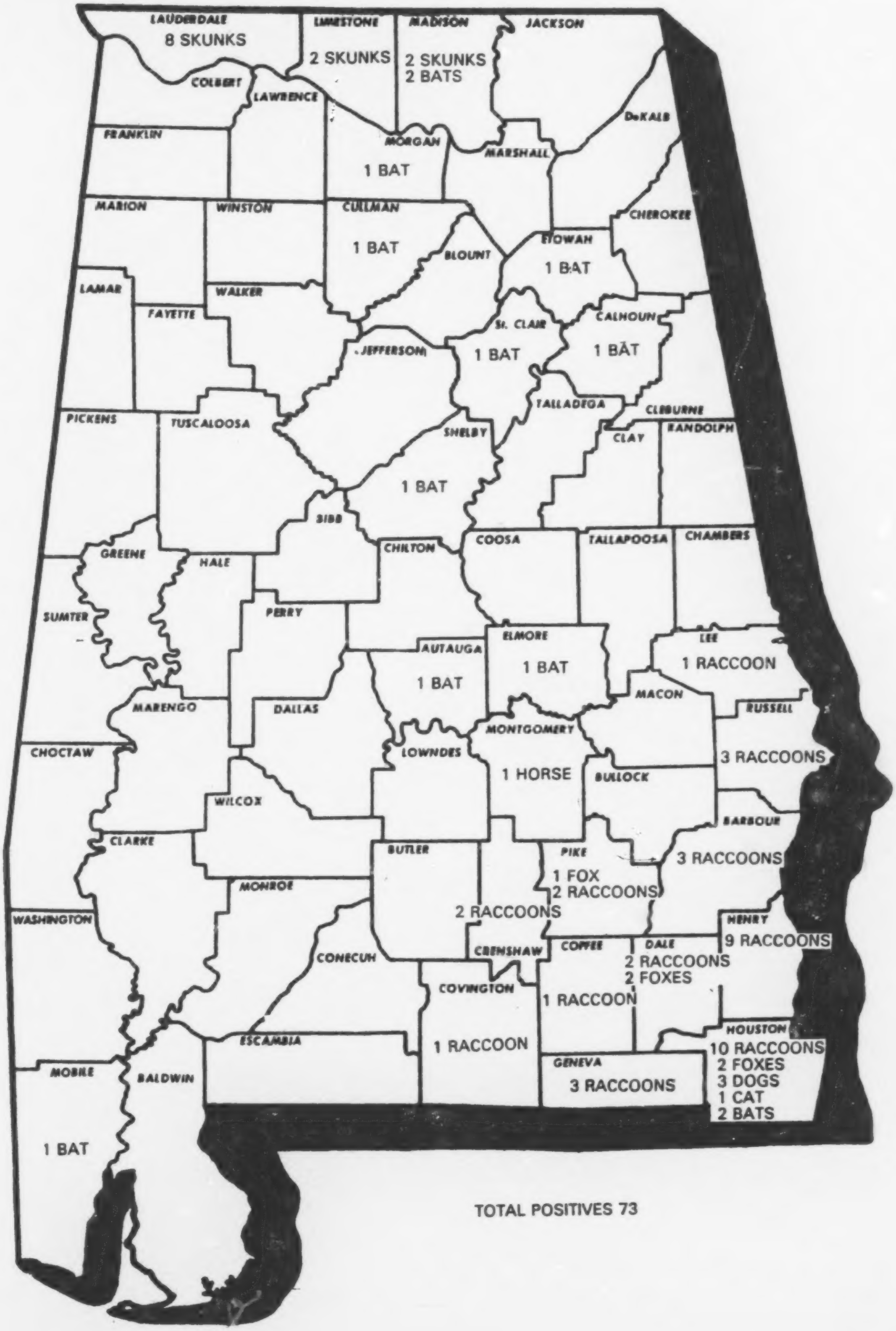
The fluorescent antibody procedure for rabies was performed on 1,327 animal brains. Fifty-one of these were diagnosed as positive. This represents a 15 percent increase over 1978 in total specimens and a 27.5 percent increase in positives.

The animals diagnosed as positive for rabies were:

Raccoon	37
Fox	5
Bat	4
Dog	3
Horse	1
Cat	1

Streptococci

Through October 15, 1979, when this program was discontinued, 32,583 throat swabs were examined for the presence of Group A Streptococci. Of these, 1,779 were positive by the fluorescent antibody technique.


LAUDERDALE
8 SKUNKS
LIMESTONE
2 SKUNKS
MADISON
2 SKUNKS
2 BATS
JACKSON
COLBERT
LAWRENCE
DeKALB
FRANKLIN
MORGAN
1 BAT
MARSHALL
MARION
WINSTON
CULLMAN
1 BAT
CHEROKEE
BLOUNT
ETOWAH
1 BAT
LAMAR
WALKER
FAYETTE
ST. CLAIR
CALHOUN
JEFFERSON
1 BAT
1 BAT
TALLADEGA
CLEBURNE
PICKENS
TUSCALOOSA
SHELBY
CLAY
RANDOLPH
1 BAT
BIBB
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
GREENE
HALE
SUMTER
PERRY
ELMORE
LEE
AUTAUGA
1 BAT
1 RACCOON
1 BAT
MACON
MARENGO
DALLAS
RUSSELL
MONTGOMERY
CHOCTAW
LOWNDES
3 RACCOONS
1 HORSE
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE
3 RACCOONS
1 FOX
2 RACCOONS
MONROE
2 RACCOONS
WASHINGTON
HENRY
9 RACCOONS
CRENSHAW
COFFEE
DALE
2 RACCOONS
2 FOXES
CONECUH
COVINGTON
1 RACCOON
HOUSTON
ESCAMBIA
1 RACCOON
10 RACCOONS
2 FOXES
GENEVA
3 DOGS
MOBILE
BALDWIN
3 RACCOONS
1 CAT
2 BATS
1 BAT

TOTAL POSITIVES 73

1979
POSITIVE RABIES IN ALABAMA

Entire State	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Autauga							1 Bat						1
Baldwin													
Barbour					1 Raccoon			1 Raccoon	1 Raccoon				3
Bibb													
Blount													
Bullock													
Butler													
Calhoun										1Bat			1
Chambers													
Chilton													
Choctaw													
Clarke													
Clay													
Cleburne													
Coffee						1Raccoon							1
Colbert													
Conecuh													
Coosa													
Covington										1 Raccoon			1
Crenshaw				2 Raccoon									2
Cullman										1 Bat			1
Dale								2 Foxes 1 Raccoon			1 Raccoon		4
Dallas													
DeKalb													
Elmore								1 Bat					
Escambia													
Etowah								1 Bat					1
Fayette													
Franklin													
Geneva				1 Raccoon				2 Raccoons					3
Greene													
Hale													
Henry		2 Raccoons		2 Raccoons	1 Raccoon		1 Raccoon	1 Raccoon	1 Raccoon	1 Raccoon			9
Houston		1 Raccoon	1 Raccoon	2 Foxes 1 Raccoon 1 Dog	1 Dog 1 Raccoon	1 Cat 1 Raccoon		2 Raccoons 2 Bats	1 Dog	3 Raccoons			18
Jackson													
Jefferson													
Lamar													
Lauderdale		1 Skunk	4 Skunks	1 Skunk		1 Skunk	1 Skunk						8
Lawrence													
Lee												1 Raccoon	1
Limestone							1 Skunk	1 Skunk					2
Lowndes													
Macon													
Madison		1 Skunk			1 Bat		1 Skunk	1 Bat					4
Marengo													
Marion													
Marshall													
Mobile								1 Bat					1
Monroe													
Montgomery										1 Horse			1
Morgan						1 Bat							1
Perry													
Pickens													
Pike						1 Fox	1 Raccoon	1 Raccoon					3
Randolph													
Russell					1 Raccoon		1 Raccoon		1 Raccoon				3
St. Clair									1 Bat				1
Shelby				1 Bat									1
Sumter													
Talladega					1 Bat								1
Tallapoosa													
Tuscaloosa													
Walker													
Washington													
Wilcox													
Winston													
TOTAL		3 Raccoons 2 Skunks	1 Raccoon 4 Skunks	6 Raccoons 2 Foxes 1 Dog 1 Skunk 1 Bat	4 Raccoons 1 Dog 2 Bats	2 Raccoons 1 Cat 1 Skunk 1 Bat 1 Fox	1 Bat 3 Raccoons 3 Skunks	8 Raccoons 2 Foxes 6 Bats 1 Skunk	3 Raccoons 1 Dog 1 Bat	2 Bats 5 Raccoons 1 Horse	1 Raccoon	1 Raccoon	73

Bordetella Pertussis

A direct fluorescent antibody test is employed in the identification of *Bordetella pertussis,* the causative agent of whooping cough. Of the 29 specimens examined, three were positive.

Pathogenic Escherichia Coli

A direct fluorescent antibody procedure was used in the examination of 1,306 stool cultures for the presence of pathogenic *E. coli* before this service was discontinued on October 15, 1979.

The following serotypes were isolated:

026:B6 (K60)	11
055:B5 (K59)	12
0111:B4 (K58)	18
0127:B7 (K63)	8
0186:B7 (K61)	25
0119:B14 (K69)	9
0125:B15 (K70)	5
0126:B16 (K71)	29
0128:B12 (K67)	22
0124:B17 (K72)	18
Poly B	9
Total Positives	166

Neisseria Gonorrhoeae

The Central Laboratory screened 66,104 cultures for the presence of *Neisseria gonorrhoeae* and reported 5,304 (eight percent) positives. Pencillin sensitivity and beta lactamase tests were run on 22 suspected penicillinase producing strains, but none were found to be positive.

Before being discontinued in October, 1,682 venereal smears were examined and 591 positives reported.

Water Bacteriology

This laboratory analyzes public and private drinking water supplies for the presence of coliform organisms bacteria which indicates possible fecal contamination, and for the presence of residual chlorine. Table I shows a breakdown of the 13,965 samples tested.

TABLE I
TESTS OF DRINKING WATER SAMPLES—1979

Type Sample	Number of Samples	Number Positive	Percent Positive	Number Negative	Percent Negative	Percent* Unsatisfactory
Public Supply	11,772	804	7%	10,371	88%	5%
Private Supply	2,193	730	33%	1,162	53%	14%

*Unsatisfactory samples consist of those broken in transit or received more than 30 hours after collection.

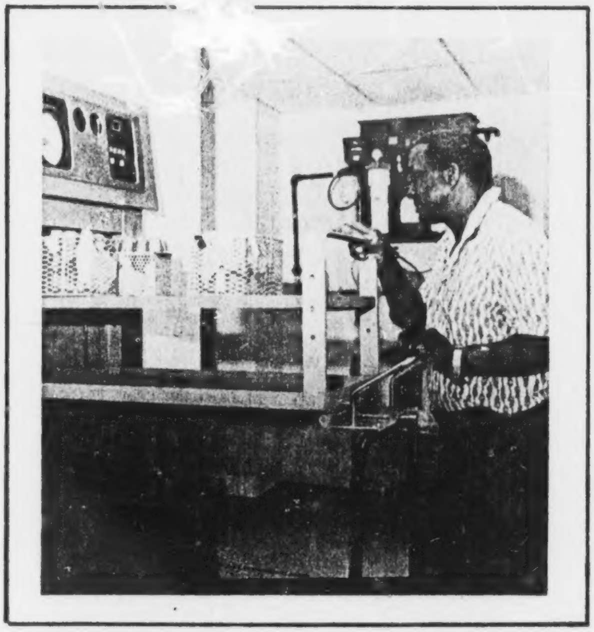
Dairy Bacteriology

The 4,692 dairy products received were examined in accordance with the procedures described in the 13th edition of Standard Methods for the Examination of Dairy Products. Table II shows a breakdown of types of samples and tests performed.

TABLE II
TESTS OF DAIRY PRODUCTS

Type	Number of Samples	Specific Gravity	Butter Fat	Phosphatase	Coliform	Antibiotic	WMT*	SPC**	Exams.
Raw Milk	1,067	1,067					1,067	1,067	4,268
Homogenized Milk	323	323	323	323	323	1,067		323	1,938
Skim Milk	270	270	270	270	270	323		270	1,620
Chocolate Milk	237		237	237	237	270		237	1,185
Half and Half	136		136	136	136	237		136	680
Whipping Cream	120		120	120	120	136		120	600
Cottage Cheese	94			94	94	120			188
Buttermilk	108			108	108				216
Others Cultured	213			213	213				426
Hard Ice Cream	47				47	40		47	134
Soft Ice Cream	1,905				1,905	1,026		1,905	4,836
Eggnog	13				13	13		13	39
Empty Cartons	53				53			53	106
Miscellaneous	19				19			19	38
Unsatisfactory	87								87
TOTALS	4,692	1,660	1,086	1,501	3,538	3,232	1,067	4,190	16,274

*Wisconsin Mastitis Test
**Standard Plate Count



Parasitology

This section examined 18,504 specimens for the presence of intestinal parasites. The following infections were reported:

Giardia lamblia	580
Entamoeba coli	558
Endolimax nana	392
Ascaris lumbricoides	371

Enterobius vermicularis	190
Entamoeba hartmanni	100
Hookworm	72
Trichuris trichiura	22
Strongyloides	17
Iodamoeba butschlii	9
Entamoeba histolytica	7
Hymenolepis nana	1
Taenia	1

Of the fourteen blood smears received for malarial examination, four were positive for *Plasmodium vivax*.

Food Bacteriology

Of the 181 food samples processed, sixteen (16) were found to be contaminated with bacteria frequently implicated in foodborne disease. The following isolations were made:

ORGANISMS	FOOD(S)
Staphylococci—Coagulase positive (5)	baked ham, corn pudding, cauliflower, tomatoes, weiner and chicken
Clostridium perfringens (1)	turkey, chicken and gravy
Bacillus cereus (10)	turkey, gravy, Sprite, roll, egg roll, fried rice, baked ham and 2 strawberry tarts

The 987 examinations performed included 27 plate counts and 12 toxin assays.

Other Activities

All sections in the Bacteriology Division were involved in proficiency testing activities. Check specimens were sent to branch laboratories in *Neisseria gonorrhoeae*, rabies, and parasitology. General Bacteriology served as a reference laboratory for the Center for Disease Control and the New York State Health Department. The GC Section was a reference laboratory for the Center for Disease Control and the Tennessee State Health Department.

One microbiologist attended a workshop in the "Identification of Gram Negative Rods" sponsored by the University of Alabama in Birmingham. Two microbiologists made a presentation at the 12th Annual Food and Milk Sanitation Workshop sponsored by the Division of Inspection. A microbiologist attended a one week Clinical Bacteriology Workshop conducted by the Center for Disease Control at the state laboratory, and two supervisors attended a Center for Disease Control course in Health and Medical Laboratory Management, held at the Central Laboratory. A microbiologist from the Sanitation Section spent two weeks in Cincinnati at a Food and Drug Administration training session in The Detection of Staphylococcal Enterotoxins in Foods.

In addition to the routine workload, the Rabies Section examined 76 raccoon brains as part of a three year survey being conducted by the Auburn University School of Veterinary Medicine. Two positives were reported.

Personnel consisted of one Microbiologist IV, six Microbiologist III's, two Microbiologist II's, six Microbiologist I's and two Laboratory Technicians II's.

One Microbiologist IV transferred to this division in October.

CENTRAL SERVICES

Purchasing

The purchasing office is responsible for requisitioning equipment and supplies for the central and branch laboratories, and for processing orders for specimen containers statewide. Supporting services for the central laboratory such as janitorial services; mail pickup and delivery; specimen container preparation; packaging and shipping specimens to the Center for Disease Control; and UPS shipments to branch laboratories and county health departments are administered through this office.

The following charts detail these activities.

TABLE I

SERVICES TO CENTRAL AND BRANCH LABORATORIES

Requisitions processed	8,542
Purchase Orders prepared	1,246
Items ordered	4,984
Orders shipped by UPS	5,645
Equipment inventoried semiannually	
Over $100.00	1,330
Under $100.00	260
Approximate amount expended for equipment, supplies and services	$ 676,997.00
Central Laboratory Budget, 1979	$2,285,112.00
Branch Laboratories Budget, 1979	$1,156,624.00

TABLE II
SPECIMEN CONTAINERS DISTRIBUTED

Enteric	3,015
Streptococci	27,298
Diphtheria	9
Staphylococci	138
Miscellaneous Bacteriology	60
Special Bacteriology	125
Tuberculosis	18,952
Gonococci	1,360
Pinworms	1,790
Cytology	1,106
Intestinal Parasites	14,956
Toxoplasmosis	3,531
FTA-ABS	563
VDRL	63,312

Virus Serology	3,686
Fungal Serology	2,547
Sickle Cell Kits	129,041
Virus Isolation	224
Rh Blood	902
Private Water	3,691
Public Water	12,856
Milk and Milk Products	3,350
TOTAL	292,512

Media

The media laboratory prepared approximately 263 different media on a routine basis in 1979, making a total volume of 11,916 liters. The single most impressive task continued to be the preparation and packaging of Thayer-Martin Media for the statewide GC program. The 435,060 plates prepared represents a 9.7 percent increase over 1978, although the total volume showed only a 0.9 percent increase.

The following preparations were made:

PBA and Lowenstein for TB	160,993	tubes
Other tube media for TB	39,808	tubes
Middlebrook sensitivity	11,273	plates
Thayer-Martin	435,060	plates
Other routine plates	87,331	plates
Routine tube media, other than TB	1,534	liters
Solutions	1,590	liters
Total volume of media	11,916	liters
Total number of media	263	

Wash Room

This section is responsible for decontaminating, washing and sterilizing glassware and other laboratory equipment. It also prepared 21,404 sterile milk and water bottles for specimen collection, and 6,077 dilution blanks for the milk testing program.

Animal House

Animal house personnel weaned 6,730 mice and 170 guinea pigs during the year. Of these, 1,100 pregnant females and 1,100 male mice were delivered to Birmingham, and 965 mice were given to Auburn University in Montgomery and Huntingdon College. Assistance was given the TB laboratory in the weekly inoculation and autopsy of guinea pigs. Some 146 cages of mice were set up for both TB and Bacteriology, and animal house workers assisted in the inoculation and harvesting of over 3,100 rabies infected and normal mice for the rabies section. Brains were removed from animal heads for rabies examination on a routine basis.

Other Activities

A workshop in Health and Medical Laboratory Management was attended by two microbiologists from the Central Services Division. Pursuant to this workshop, consultants from the Center for Disease Control were invited to help in setting up a cost accounting system appropriate for this laboratory.

Personnel for this division included one Microbiologist V, one Microbiologist IV, one Microbiologist II, one Microbiologist I, two Clerk Typist II's, one Clerk Stenographer I, one Laboratory Technician III, four Laboratory Technician II's, seven Laboratory Technician I's, seven Laboratory Aide II's, one Laboratory Aide I and four Laborers.

SEROLOGY, CYTOLOGY, METABOLIC AND GENETIC DISEASES AND CONTINUING EDUCATION

Syphylis Serology

The VDRL slide qualitative test was performed on 113,208 blood specimens, a decrease of 11,010 from the previous year. The reduction in specimens resulted from the discontinuance of services to private physicians, hospitals and laboratories due to the cut back in funding for the laboratory. The VDRL slide test and total protein determinations were performed on 2,405 spinal fluids, an increase of 746 over 1978. Reactives were quantitated.

Laboratories performing premarital blood tests for syphilis were reviewed for certification as required in Title 22, Chapter 16, 1975 Code of Alabama. The Central Laboratory administered an ongoing quality control program for ninety-six Red Cross, blood banking and clinical laboratories performing these tests. Laboratories licensed by the Clinical Laboratories Improvement Act (CLIA) of 1967 for the performance of syphilis serology on an interstate basis were also evaluated during the year.

This division continued to serve as a reference laboratory for CDC and the states of Tennessee and Florida for the Rapid Plasma Reagent (18 mm circle) Card Test (RPR), VDRL slide test and microhemagglutination assay for *Treponema pallidum* (MHA-TP).

Complement Fixation Tests

A complement fixation test for histoplasmosis (both mycelial and yeast phases), blastomycosis and coccidioidomycosis was performed on 2,409 specimens.

Those showing a titer of 1:8 or above were:

HISTOPLASMA CAPSULATUM

Mycelial	Yeast	Both
41	141	49

BLASTOMYCES DERMATITIDIS

69

COCCIDIOIDES IMMITIS
40

ALL ANTIGENS
6

B. DERMATITIDIS & H. CAPSULATUM
56

C. IMMITIS & H. CAPSULATUM
20

B. DERMATITIDIS & C. IMMITIS
9

Paired sera for antibodies to respiratory or neurotropic viruses and rickettsiae totaled 1,805. Results interpreted as compatible with recent infection (specimens showing a four-fold or greater rise in titer of the convalescent specimen over the acute specimen) were:

Influenza (Type A)	42
Adenovirus	7
Mycoplasma pneumoniae	44
Chlamydia group	3
Parainfluenza (Type 2)	2
St. Louis Encephalitis	1
California Encephalitis	1
Herpes hominis Group	14
Mumps Soluble	2
Mumps Viral	6
Spotted Fever Group	11
Varicella	1
Cytomegalovirus	5
Rubeola Virus	65
TOTAL	204

Negative results were obtained on 434 paired sera, and 55 pairs were unsatisfactory.

Inconclusive results (suggesting involvement at some undetermined time but not necessarily in the current illness) were:

Influenza A	278
Influenza B	60
Adenovirus Group	69
Mycoplasma pneumoniae	229
Chlamydia	23
Respiratory Syncytial	16
Parainfluenza (Type 2)	12
Parainfluenza (Type 3)	13
Eastern Equine Encephalitis	1
Western Equine Encephalitis	3
St. Louis Encephalitis	7
Lymphocytic Choriomeningitis	1
California Encephalitis	1
Mumps Soluble	19
Mumps Viral	62
Herpes hominis	239
Spotted Fever Group	14
Murine Typhus Group	3
Polio (Type I)	3
Polio (Type III)	4
Rubeola	156
Varicella	16
Cytomegalovirus	87
TOTAL	1,316

Since obtaining convalescent specimens continued to be difficult, single serums were tested and titers reported.

Of 1,890 single specimens tested, 852 showed no titer and 68 were unsatisfactory. Titers obtained on 970 single serums are as shown in the following chart.

Single Specimens	1:8	1:16	1:32	1:64	1:128	1:256	1:512	1:1024	1:4096
Influenza (Type A)	164	78	26	3	3	2			
Influenza (Type B)	55	9							
Adenovirus	30	26	3	1	4	1			
Mycoplasma pneumoniae	84	51	28	14	7	12	7	5	1
Chlamydia	8	9	9	5					
Western Equine Encephalitis	1								
St. Louis Encephalitis	4								
Mumps Soluble	7	2							
Mumps Viral	26	2	2						
Herpes Simplex	49	112	106	34	1				
Cytomegalovirus	47	42	30	7	1				
Spotted Fever Group			1						
Rubeola	22	18	9	12	7	1	4	1	
Varicella	6	1	1	2		1			
Parainfluenza (Type 2)	1	2							
Parainfluenza (Type 3)	2	2							
Respiratory Syncytial	17	7	4	2					
Polio		1							
Polio III	2								

Hemagglutination Tests

The hemagglutination inhibition test for rubella antibodies was performed on 441 paired sera and 13,639 single specimens. Twenty-nine pairs showed a four-fold or greater rise in titer.

A fee of $4.00 per specimen was charged for routine base line testing on samples from private laboratories and physicians.

The indirect hemagglutination test for amebiasis was performed on 384 specimens, with three positives reported.

This section prepared 500 amebic serology kits for distribution and forwarded 1,261 sera and 49 miscellaneous samples to the Center for Disease Control.

Agar Gel Precipitin Test

The Agar Gel Preipitin Test (AGPT) supplemented the complement fixation (CF) procedure for *Histoplasma capsulatum.*

A total of 2,409 sera was tested for the presence of the M and H bands of histoplasmosis. Results of the tests by AGPT and CF are summarized as follows:

M band only	117
M and H bands only	11
CF Titers 1:8 or >	75
M band + CF titers 1:8 or >	90
M and H bands + CF titers 1:8 or >	46
Negative results to both procedures	2,076

The Agar Gel Precipitin Test (AGPT) was performed on 148 specimens for Aspergillus species. Sixteen were found to be positive.

Bacterial Agglutination Tests

A tube agglutination test for Brucella and *F. tularensis* was performed on 83 specimens. Results showed two specimens to be positive for Brucella.

Metabolic Tests—PKU Screening

During the year 97,456 specimens were received for phenylketonuria (PKU) testing. This figure represents an increase of 3,183 specimens over the previous year.

Results are shown in the following tables:

PKU Specimens	Number Tested	Positives
Newborn (White)	32,836	3
Newborn (Black)	17,998	
Four-Week (White)	30,209	
Four-Week (Black)	14,467	
Older Children	13	
Maternal	602	
Center for Development and Learning Disorders, University of South Alabama Medical Center and Miscellaneous	225	
Repeats:		
Slight transient elevations	70	
Baby not feeding long enough	271	
Inadequate Bloods	372	
Dietary follow-up	393	
TOTAL	97,456	3

Total positives since the program began in 1964 were:

Newborn (White)	36
Newborn (Black)	1
Four Week (White) First Test	2*
Older Children	5
Partlow (New Admissions)	3
TOTAL	47

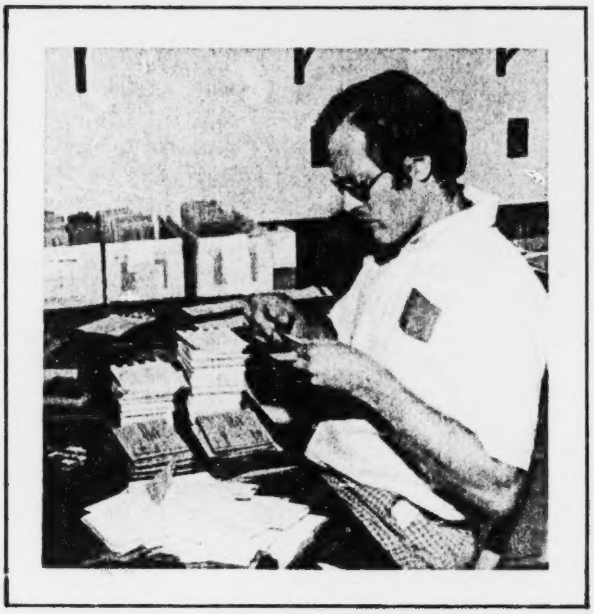
PKU Chemistry

Chemical determinations were made as follows:

Nitroprusside test for cystinuria and homocystinuria (Urine specimens)	126
Chromatography (Sulfanilic acid stained for histidine and urinary metabolites)	126
Chromatography (ninhydrin stained for amino acid disorders)	194

A total of 697 tests was performed on 319 blood and urine specimens from infants and older children referred from physicians throughout the state for amino acid screening.

A total of six fluorometric determinations was performed to confirm phenylalanine and tyrosine levels on three PKU infants.



Neonatal Hypothyroid Screening

In February, 1978, a pilot program in neonatal hypothyroid screening was begun by utilizing part of the dried blood on filter papers submitted for PKU testing. Initially, only those specimens showing abnormalities were reported since funding was uncertain. On October 1, 1979, the law was amended to require that every newborn 28 days old or less be tested for hypothyroidism as well as PKU. Funding was provided at this time, although the program was not announced in order to give the laboratory time to acquire the necessary equipment and to train personnel needed for this volume of work. In addition, a study was initiated to determine the Standard Deviation and cut-off to be used in the statewide T_4 screening program.

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*Six week old infant tested for first time by the Clinical Laboratory Administration included in this figure.

Results of the 62,263 infants screened for neonatal hypothyroidism in 1979 are shown below.

Specimens	Number Tested	Examinations	Cases Detected
T_4 (Thyroxine Level)			
Newborn (White)	32,836	32,836	10
Newborn (Black)	17,998	17,998	
Four Week (White)	7,606	7,606	
Four Week (Black)	3,823	3,823	
Low T_4 Repeats		2,126	
Inadequate Bloods		1,382	
Unsatisfactory		36	
TSH (Thyroid Stimulating Hormone)		5,395	
	62,263	71,202	10

Total Specimens (Feb., 1978-Dec., 1979)	Total Examinations	Cases Detected
100,958	124,047	14 1(TBG)*

*One infant with deficient Thyroxine Binding Globulin (TBG) was detected.

Abnormal Hemoglobin Screening (Including Sickle Cell Anemia)

During the year 64,4333 specimens of blood collected on filter paper were tested by electrophoresis for abnormal hemoglobins. This figure represents an increase of 1,319 specimens over the previous year. Results are shown on the following table:

AA	56,104	87.07 percent
AS	4,979	7.72 percent
AC	1,572	2.44 percent
SS	55	.09 percent
SC	104	.16 percent
SF	65	
AF	729	
A high F	345	
CC	20	
AE	3	
AI	2	
AG Philadelphia	7	
ASG	3	
AG Galveston	2	
A Mobile	2	
A Montgomery	6	
AO Arab	5	
AN Baltimore	4	
A Camden	3	
A + Fast Moving Hemoglobin	11	
S + Fast Moving Hemoglobin	2	
Non C	5	
Non S	34	
SD—Los Angeles	1	
EE	1	
S Hope	1	
A Other	1	
Thalassemias		
A high A_2	8	
FA	29	
CA	13	
SA	48	
Repeats	70	
Unsatisfactory	199	
TOTAL	64,433	

Electrophoresis at an acid pH was performed on 8,143 specimens to distinguish other abnormal hemoglobins having the same mobilities as S and C at an alkaline pH.

Polypeptide chain involvement was determined by globin chain electrophoresis for 73 specimens.

Whole blood specimens were requested from patients having abnormal hemoglobins other than S or C, and these were sent to the University of Texas Medical School, Galveston, for confirmation and/or identification.

Biochemistry

The childhood lead poisoning control section provided services for lead poisoning detection in one to six year old children. This laboratory was certified for erythrocyte protoporphyrin (EP) and blood lead analysis by the Department of Health, Education, and Welfare (HEW) and participated in the Center for Disease Control proficiency testing programs.

All specimens received were screened for EP levels, and those found elevated were confirmed by atomic absorption blood lead.

The 5,860 examinations performed on 4,859 specimens produced the following results:

Class	Number
I (Normal)	4,349
II (Minimally elevated)	363
III (Moderately Elevated)	111
IV (Extremely Elevated, compatible with lead poisoning)	17
Unsatisfactory	19
TOTAL	4,859

As a result of the loss of 314(d) funds the lead screening program was discontinued on October 31, 1979.

Cytology

Examination of cervical and vaginal smears for the early detection of cancer and its prevention was performed for 46 counties participating in the cancer detection program.

Some 15,928 smears were stained, screened and classified by the Papanicolaou method, an increase of 1,509 over last year.

Findings for the year were as follows:

Class	Number
I	15,101
II	738
III	67
IV	21
V	1
TOTAL	15,928

In addition to the cervical and vaginal smears, 15 smears of breast secretions were examined.

All abnormal or atypical smears with a classification of II or above were referred to a pathologist for review, final diagnosis and recommendations. Quality control was accomplished by the pathologist's review of all atypical smears and of ten percent of the smears found to be Class I by this laboratory.

Fluorescent Microscopy

The Fluorescent Treponemal Antibody-Absorption (FTA-ABS) test for syphilis was performed on 3,594 specimens of blood with the following results:

Reactive	2,202
Nonreactive	1,260
Borderline	96
Unsatisfactory	36

The indirect immunofluorescence test was employed for the detection of antibodies to *Toxoplasma gondii.* Of the 1,570 specimens tested, titers of 1:16 or greater were obtained on 456, with 170 of them titering 1:256 or greater.

Twenty-six sera were submitted to the Center for Disease Control to be tested for IgM antibodies to *T. gondii.* In addition, seven dogs and six cats were referred for toxoplasmosis testing.

Continuing Education

One microbiologist, serving as training coordinator, planned workshops involving 35 participants from the Health Department, blood banks, hospitals, and private laboratories in Alabama. Courses presented were:

(1) Laboratory Methods in Clinical Bacteriology
(2) Workshop in Health and Medical Laboratory Management

Four field workers from the Center for Disease Control (CDC) and two microbiologists were involved in teaching.

Application was made to the American Society for Medical Technology for Professional Acknowledgement of Continuing Education (P.A.C.E.) program. As a result, qualified students earned Continuing Education Units (C.E.U.'s) for the courses presented.

During the year, the Center for Disease Control furnished the laboratory with update material which included slides, tapes, and study manuals for programs in microbiology, clinical chemistry and hematology. This series was catalogued and distributed on request to laboratories and teaching personnel over the state.

Other Activities

One microbiologist attended a workshop in Laboratory Diagnosis by Serologic Methods. In August, one microbiologist attended a three day workshop in Neonatal Hypothyroidism designed to establish guidelines of standardization for the nationwide neonatal hypothyroid screening programs.

The supervisor of the cytology section participated in a series of workshops and lectures at the Southern Association of Cytotechnologists in Atlanta, Georgia, during the first week of August. In April a cytotechnologist participated in an "in-service" training program in cancer detection for nurses.

The Student Coalition for Community Affairs held health fairs in Kennedy, Pennington and Thomaston, Alabama. The Serology Division assisted in these by providing supplies, consultation, and by performing 825 sickle cell and 925 VDRL slide tests.

Health fairs were held at Alabama State University through the coordinated efforts of the Bureau of Primary Prevention, Bureau of Maternal and Child Health, Montgomery County Health Department, and the laboratory. VDRL, sickle cell, and pap smears were examined by the laboratory. Results obtained were:

Sickle Cell	
AS	6
AO	3
AA	54

VDRL	
Reactive	1
Nonreactive	25

Pap Smears	
Class I	16
Class II	2
Class III	1

The Serology Division served the Center for Disease Control as a reference laboratory for hemoglobinopathies, lead screening, rubella, febrile agglutinations, VDRL slide, RPR, and MHA-TP procedures.

Personnel consisted of one Microbiologist IV, four Microbiologist III's, seven Microbiologist II's, five Microbiologist I's, one Laboratory Technician III, two Laboratory Technician II's, and one Laboratory Aide II.

Four microbiologists retired or resigned during the year and were not replaced.

TUBERCULOSIS AND MYCOLOGY DIVISION

Mycobacteriology

A total of 35,722 specimens for tuberculosis examination was received in 1979, reflecting an 11.59 percent decrease over last year. The table below gives a breakdown of examinations and results.

TUBERCULOSIS SPECIMENS EXAMINED

Total specimens			35,722
Microscopic smears		34,342	
Positive	1,103		
Negative	33,239		
Cultures for confirmation		885	
Unsatisfactory specimens		495	
Total Cultures			35,227
Positive		2,552	
Negative		28,992	
Unsatisfactory contaminated		2,095	
Mycobacteria not *M. tuberculosis**		1,568	
Nocardia asteroides		19	
Nocardia brasiliensis		1	
Total animal inoculations			197
Positive		1	
Negative		195	
Unsatisfactory		1	

*Only 502 of these cultures were suspected pathogens and were identified as follows:

M. kansasii	18
M. marinum	3
M. asiaticum	1
M. scrofulaceum	21
M. avium-M. intracellulare complex	403
M. chelonei (M. abscessus)	42
M. fortuitum	14

Special tests performed for identification:

Niacin tests, to differentiate *M. tuberculosis*		804
Subcultures, biochemical and serological tests		1,391
Drug susceptibility tests (3.13% increase)		928
Direct tests	124	
Indirect tests	804	

Mycology

The 4,946 specimens received by the Mycology Section represents a 77.28 percent increase over last year. The following pathogenic, or possible pathogenic, fungi were identified.

Pathogenic or Possible Pathogenic Fungi Identified

Blastomyces dermititidis	25
Coccidioides immitis	3
Cryptococcus neoformans	21
Cryptococcus albidus	5
Cryptococcus laurentii	1
Cryptococcus uniguttulatus	1
Histoplasma capsulatum	28
Sporothrix schenckii	8
Nocardia asteroides	1
Cladosporium carrionii	1
Petriellidium (Allescheria) boydii	1
Fonsecaea pedrosoi	2
Phialophora jeanselmei	6
Phialophora verrucosa	1
Candida albicans	132
Candida guillermondii	6
Candida krusei	11
Candida norvegensis	2
Candida parapsilosis	48
Candida pseudotropicalis	2
Candida stellatoidea	5
Candida tropicalis	51
Torulopsis glabrata	23
Trichosporon cutaneum	2
Geotrichum candidum	24
Aspergillus clavatus	1
Aspergillus fumigatus	14
Aspergillus flavus	17
Aspergillus glaucus	1
Aspergillus nidulans	19
Aspergillus niger	17
Aspergillus terreus	7
Rhizopus oryzae	1
Microsporum audouinii	1
Microsporum canis	5
Microsporum gypseum	3
Microsporum nanum	1
Epidermophyton floccosum	4
Trichophyton mentagrophytes	12
Trichophyton rubrum	44
Trichophyton schoenleinii	1
Trichophyton tonsurans	17

Other Activities

In addition to receiving proficiency testing samples from the Center for Disease Control in mycobacteriology, the Mycology Section served as a reference laboratory for the Center for Disease Control and the New York City Public Health Laboratory.

One microbiologist attended the meeting of the International Working Group on Mycobacterial Taxonomy in Atlanta, Georgia. This laboratory is participating in an open-end study of mycobacteria whose classification is not established. So far, 30 cultures have been examined by 47 different procedures and the results have been mailed to the project coordinator for numberical taxonomical analysis.

Two microbiologists went to the Center for Disease Control for bench training in the isolation of *Histoplasma capsulatum* from soil samples. Since that time this laboratory has been processing all soil samples collected from areas where there has been a histoplasmosis outbreak.

Bench training was given to several microbiologists and students from other laboratories in the state.

The 15 personnel in this department included one Microbiologist I, one Laboratory Technician III and two Laboratory Technician I's.

Clerical Division

Over 615,875 medical reports were mailed from the Central Laboratory this year. Typing and mailing reports as well as numerous other clerical functions were carried out by the following personnel: two Clerk Typist III's, two Clerk III's, one Clerk Stenographer II, seven Clerk Typist II's and three Clerk Typist I's.

ANNISTON BRANCH LABORATORY

The Anniston Branch Laboratory was officially closed on October 31, 1979. During the ten months prior to its closing the laboratory received 38,794 specimens, with the venereal disease program accounting for a good portion of this total. Some 16,282 cultures were screened for the presence of *Neisseria gonorrhoeae,* with a positive rate of 5.1 percent. The VDRL slide test for syphilis was performed on 10,457 bloods. Reactives were quantitated.

The Sanitary Bacteriology Section examined 4,053 dairy products and 7,590 water specimens from an eleven county area. In addition, 94 samples of oysters were examined, and the food section participated in a Food Proficiency Testing study conducted by the Food and Drug Administration.

Three rabid bats were found among the 173 animal heads received for rabies examination.

The Anniston Branch Laboratory cleaned, packaged, and distributed a variety of containers and supplies; hosted several student tours; and conducted demonstrations for food merchants and county environmentalist.

The staff included one Microbiologist III, one Microbiologist I, two Laboratory Technician II's, one Laboratory Aide, one Clerk Typist and one laborer. The following personnel were affected by the Laboratory closing: Mrs. Colbert Allen, Laboratory Technician II, laid off; Mrs. Cassandra Brown, Laboratory Aide II, laid off; Mrs. Donna Hydrick, Clerk Typist I, transferred to Calhoun County Health Department; Michael Matthews, Microbiologist III, transferred to Birmingham Branch Laboratory as Microbiologist II; Miss Susan Sawyer, Microbiologist I, laid off; Mrs. Deloris Thomas, Laborer, laid off; and Mrs. Emma Wilson, Laboratory Technician II, transferred to Birmingham Branch Laboratory.

BIRMINGHAM BRANCH LABORATORY

The Birmingham Branch Laboratory received 310,634 specimens in 1979, requiring over 350,300 examinations.

Virology

The virus isolation program was one of several services eliminated in October of this year. Before being discontinued, however, 850 specimens were received from which the following 93 isolations were made.

Adenovirus Type II	1
Coxsackie Type B-2	11
Coxsackie Type B-5	1
Echo Type 5	1
Echo Type 6	2
Echo Type 7	4
Echo Type 9	4
Echo Type 11	12
Herpes Simplex	15
Influenza/A	5
Parainfluenza/II	1
Parainfluenza/III	32
Polio II	1
Unidentified	3

Rabies

The rabies section examined 597 animal brains by fluorescent antibody procedure and found two of these to be positive for rabies virus. This represents a 33.9 percent increase in specimens over 1978.

Serology

The VDRL slide test for syphilis was performed on 147,507 bloods and 50 spinal fluids. Reactives were quantitated. The VDRL test on spinal fluids was transferred to the Central Laboratory.

Sanitary Bacteriology

This section received 10,836 dairy samples requiring 30,946 tests. In addition, there were 13,744 public and private water samples examined by the membrane filter technique for the presence of coliform bacteria, and 13,169 of these were tested for the presence of residual chlorine.

Fluorometric determination of fluoride concentration was made on 441 water samples. A total of 155 oyster samples were examined before the oyster testing program was discontinued on October 15, 1979.

A microbiologist at the Birmingham Branch Laboratory assumed the duties of the Laboratory Evaluation Officer in June of this year. The primary duties of this position are to evaluate all state milk, water and shellfish laboratories and to send split milk proficiency testing samples to every state approved dairy laboratory.

Neisseria Gonorrhoeae

Of the 129,832 cultures screened for the presence of *Neisseria gonorrhoeae* 8,306 positives (6.4 percent) were reported. Examination of venereal smears was discontinued in October. Up to that time 5,934 smears were examined.

Other Activities

This laboratory continued its participation in proficiency testing by receiving check samples in rabies, *Neisseria gonorrhoeae*, syphilis serology and dairy products. Eight analysts received certification in milk examinations.

The director attended a workshop in Health and Medical Laboratory Management. One microbiologist attended an FDA sponsored Milk Evaluation Officer Certification course and an Environmental Protection Agency sponsored Water Officer Certification course in Cincinnati.

Construction was begun on a new laboratory scheduled for completion in April of 1980.

Personnel included one Microbiologist IV, four Microbiologist III's, four Microbiologist II's, four Microbiologist I's, three Laboratory Technician III's, one Laboratory Technician II, three Laboratory Technician I's, one Laboratory Aide II, one Laboratory Aide I, two Clerk Typist II's and one Clerk Typist.

DECATUR BRANCH LABORATORY

The Decatur Branch Laboratory examined 64,894 specimens this year, reflecting a 6.1 percent increase over 1978 in spite of the cut back in services affecting the entire laboratory system. This increase can be attributed to the transfer of services from the Huntsville Branch Laboratory which closed on October 31.

The Serology Section performed 37,299 VDRL slide tests for syphilis and quantitated reactives. During November and December, 1,832 Rh tests previously performed in the Huntsville Branch Laboratory were examined.

The 9,016 cultures screened for *Neisseria gonorrhoeae* represent a 30 percent increase over last year. The positive rate was 8.4 percent.

The 299 animals examined for rabies represent a 34 percent increase over 1978. Ten skunks and one bat were reported as positive.

In an effort to centralize the parasitology program, these specimens were transferred to the Central Laboratory beginning in June. Until that time, however, 1,763 specimens were examined in the Decatur Branch Laboratory and the following infections were reported:

Ascaris lumbricoides	14
Enterobius vermicularis	35
Trichuris trichiura	2
Hymenolepis nana	2
Entamoeba coli	54
Endolimax nana	45
Giardia lamblia	40
Iodamoeba butschlii	4

The Sanitary Bacteriology Section tested 10,276 public and private waters for the presence of coliform bacteria. This was a 12.5 percent increase over last year. The 4,182 dairy samples examined represent a 20.5 percent increase.

The Decatur Branch Laboratory continued to participate in the Laboratory's Proficiency Testing Programs by receiving check specimens in syphilis serology, *Neisseria gonorrhoeae*, rabies and milk and dairy products.

In other activities, the Director attended a Health and Medical Laboratory Management Workshop, and other personnel participated in lecturing to Calhoun Junior College Microbiology classes and in conducting tours of the laboratory for interested groups.

Personnel consisted of one Microbiologist IV, one Microbiologist III, one Laboratory Technician II, one Laboratory Technician I, one Laboratory Aide I, and one Clerk Typist I. With the closing of the Huntsville Branch Laboratory on October 31, 1979, two Microbiologist II's were transferred to the Decatur Branch Laboratory.

DOTHAN BRANCH LABORATORY

The 19,773 specimens processed this year included 10,577 cultures for *Neisseria gonorrhoeae* from which 842 positives were reported. In addition, 6,960 public and private waters and 2,194 dairy samples were tested. Some 489 animal brains were dissected, packaged and forwarded to the Central Laboratory for rabies examination.

Specimen containers were assembled and distributed to health departments, physicians and hospitals in the seven surrounding counties.

In other activities, check specimens were received in both the dairy and *Neisseria gonorrhoeae* sections. The director attended a workshop at the Central Laboratory sponsored by the Center for Disease Control in Health and Medical Laboratory Management. In addition this laboratory assisted the Environmental Health Administration laboratory in setting up the portable multichannel analyzer used during a "radiation emergency" at the Farley Nuclear Plant and participated in Houston and Dale County training programs for food service managers. Several groups including a Brownie Troop and nursing students from George C. Wallace Junior College toured the laboratory.

Personnel consisted of one Microbiologist I, one Laboratory Technician and one Laboratory Technician I.

HUNTSVILLE BRANCH LABORATORY

Huntsville was among the four branch laboratories that closed on October 31, 1979. During the ten months the laboratory was open, a total of 66,946 specimens was received.

The Venereal Disease Section examined 15,145 cultures for *Neisseria gonorrhoeae* and found 1,125 (7.4 percent) positives; performed 29,693 VDRL slide tests for syphilis and quantitated reactives; and examined 183 venereal smears.

By the end of October this laboratory had received 9,104 blood specimens for Rh type and antibody titer, as compared with a total of 8,946 for the entire year of 1978.

The Sanitary Section examined 2,932 dairy products and 5,929 public and private water samples.

Parasitology specimens were forwarded to the Central Laboratory beginning in June of this year, but before that time 752 specimens were examined, 89 of which were positive. The following infections were found:

Ascaris lumbricoides	11
Enterobius vermicularis	10
Trichuris trichiura	5
Entamoeba coli	24
Endolimax nana	18
Giardia lamblia	24
Entamoeba hartmanni	13

Five of the 295 animal heads examined for rabies were positive.

At the time of closing, the Huntsville Branch Laboratory was staffed by two Microbiologist IV's, one Microbiologist III, one Microbiologist I, one Laboratory Technician II, and two Laboratory Technician I's. These people with specialized training had a total of over 87 years of service in the State Laboratories.

The following personnel were affected by the laboratory closing: Mrs. Emily DeShields, Microbiologist IV, transferred to Decatur Branch Laboratory as Microbiologist II; Mrs. Linda Dodson, Microbiologist III, transferred to Decatur Branch Laboratory as Microbiologist II; Mr. Walter Garner, Microbiologist IV, transferred to Montgomery Laboratory; Mrs. Ned Harris, Laboratory Technician I, laid off; Mrs. Gwendolyn Margadonna, Clerk Typist II, transferred to county health department; Mr. Archie Ray, Microbiologist I, laid off; Mrs. Vera Roberts, Laboratory Technician II, transferred to Madison County Health Department as Laboratory Aide I; and Mrs. Ethel Scruggs, Laboratory Technician I, laid off.

MOBILE BRANCH LABORATORY

The Mobile Branch Laboratory received 135,630 specimens which required 161,272 examinations.

Shellfish Section

The Oyster Testing Program was retained in this laboratory because of its importance to the industry in this area of the state. Table I shows a breakdown of the specimens received and tests done.

	Number Samples	Lauryl Tryptose MPN	Brilliant Green MPN	Fecal Coliform MPN	Standard Plate Count	A1M MPN	Salinity
Oysters	228	228	228	228	228		
Crabmeats	0	0	0	0	0		
Bay Waters	260					260	260
Other Waters	12	6	6	6		6	6

Sanitary Bacteriology

Membrance filter tests for coliform bacteria as well as chemical tests for the presence of residual chlorine were performed on 13,369 public and private water samples.

Tests performed on the 2,969 dairy samples are shown on Table II.

No. of Samples	Kind	Specific Gravity	Butter Fat	Phosphatase	Coliform	Penicillin	WMT*	2 Plate SPC**
294	Raw Milk for Processing	294				294	240	294
199	Regular and Homogenized	197	197	197	197	199		197
233	Skim	231	233	230	232	232		231
144	Chocolate Milk		144	144	144	144		144
133	Half & Half		133	50	133	133		133
102	Whip Cream		102	31	102	102		102
143	Cottage Cheese			143	143			
277	Sour Cream			277	277			
139	Buttermilk			139	139			
13	Ice Cream & Ice Milk Hard				13	13		13
1,096	Ice Milk Mix Soft				1,096	88		1,093
6	Egg Nog				6	6		6
190	Containers Empty				190			190
TOTAL 2,969		722	809	1,211	2,672	1,211	240	2,403

*Wisconsin Mastitis Test
**Standard Plate Count

Parasitology

A total of 3,781 fecal specimens were examined. The following infections were reported.

TABLE III

Entamoeba coli	165
Giardia lamblia	146
Endolimax nana	140
Ascaris lumbricoides	48
Entamoeba hartmanni	39
Hookworm	37
Trichuris trichiura	23
Clonorchis sinensis	20
Enterobius vermicularis	10
Chilomastix mesnili	7
Entamoeba histolytica	6
Strongyloides stercoralis	5
Iodamoeba butschlii	3
Hymenolepis nana	1
TOTAL	650

Fluorescent Antibody Section

Before being discontinued in October, a total of 3,272 throat swabs was received. Group A Streptococci were found in 686 (21 percent) of these specimens.

The 257 animal brains examined for rabies represents a slight decrease over last year. One bat was found to be positive.

Serology

The VDRL slide test for syphilis was performed on 59,810 bloods. Reactives were quantitated.

Neisseria Gonorrhoeae

The 50,293 cultures screened for *Neisseris gonorrhoeae* represent a 10 percent increase over last year. The positive rate was 7 percent.

Activities

This laboratory, in conjunction with several other states, completed a national study (conducted by the Shellfish Sanitation Branch of the Food and Drug Administration, FDA) to evaluate a 24 hour method for the determination of fecal coliform levels in shellfish. A total of 32 oyster samples was examined requiring 5,282 tests. This data was included in a report presented by the FDA at the Interstate Seafood Seminar held in Ocean City, Maryland.

Split sea water samples were sent out by the Northeast Technical Service Unit, FDA in June. These samples were tested and the results obtained were well within the limits of the 90 percent confidence level.

In other activities, personnel attended the annual workshop and directors' meeting sponsored by the Division of Public Water Supplies, and the Director attended a Workshop in Health and Medical Laboratory Management. Containers and supplies were packaged and distributed. Proficiency testing specimens were received in syphilis serology, rabies, *Neisseria gonorrhoeae* and milk and dairy products.

Personnel included one Microbiologist V (retired in May), one Microbiologist IV, four Microbiologist II's, four Microbiologist I's, one Laboratory Technician II (retired in September), two Laboratory Technician I's, one Laboratory Aide I, and two Clerk Typist II's.

SELMA BRANCH LABORATORY

Selma was the first of the four branch laboratories to close in 1979. Its last day of business was September 30. Up to this time 17,337 specimens were processed including 4,379 public and private water samples and 1,859 milk and dairy product samples. In addition, 11,099 *Neisseria gonorrhoeae* cultures were examined with 8.2 percent reported as positive.

The laboratory participated in an ongoing Proficiency Testing Program by running split milk samples and GC check samples sent by the Central Laboratory.

Personnel included on Microbiologist IV, one Clerk Typist II, and one Laborer. The following personnel were affected by the laboratory closing: Mrs. Betsy Givhan, Laborer, laid off; Ms. Elaine Lawrence, Clerk Typist II, transferred to Montgomery Laboratory; and Mr. Jack Wright, Microbiologist IV, transferred to Montgomery Laboratory.

TUSCALOOSA BRANCH LABORATORY

The Tuscaloosa Branch Laboratory was officially closed on October 31, 1979. During the ten months of operation, 38,892 specimens were examined. The GC Screening Program accounted for 26,457 of this number, with 1,538 positive cultures reported. Some 17,729 tests were performed on the 2,776 milk and dairy products and the 5,365 water samples received during this time.

One spider and 278 mosquito larvae were received for identification.

In addition, this laboratory packaged and distributed containers and supplies; hosted various student groups; and participated in the *Neisseria gonorrhoeae* and split milk sample proficiency programs.

Personnel included one Microbiologist IV, one Microbiologist II and three Laboratory Technician II's. The following personnel were affected by the laboratory closing: Mr. Charles Berry, Laboratory Technician II, retired; Mrs. Ruth Kirkpatrick, Microbiologist IV, retired; Mrs. Harriet Mattox, Microbiologist II, laid off; Mrs. Edith Tidwell, Laboratory Technician II, laid off; and Mrs. Beatrice Wilson, Laboratory Technician II, retired.

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Birmingham REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa					
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	5,934	985	4,933	16	5,934
	Blood - VDRL Test	128,957	1,779	124,514	1054	132,668
	W.R. Total 1,610	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	18,550	78	18,271	53	18,723
	W.R. Total 148	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL	50		49	1	49
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	129,832	8,306	119,253	2273	129,832
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN	75	44	31		152
	Membrane Filter	13,744	1,779	11,228	737	13,007
	Chemistry		162	13,007		13,169
	Dilutions					179
MILK PRODUCTS	Milks	5,386	xxxxxx	xxxxxx	xxxx	18,187
	Other	5,450	xxxxxx	xxxxxx	xxxx	12,759
SEA FOODS	Oyster - Plate Count	155	xxxxxx	xxxxxx	xxxx	155
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	310
RABIES	Smears - Negri Bodies					
	FA Examinations	397	2	579	16	585
VIRUS ISOLATION	Cultures	850	93	750	7	1,941
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS		121	xxxxxx	xxxxxx	xxxx	1,373
MISCELLANEOUS	DMSCC (91) Fluorides (441) Rodac (8)	933				1,280
Neut (26) Ref. Cult. (2) HI Arbo (365) TOTALS		310,634	13,228	292,615	4,157	350,303

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Combined REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa	24,800	2696	21,107	997	24,688
	Toxoplasma	1570	456	1097	17	1570
	Malaria	18	5	13		18
ENTERIC BACTERIOLOGY	Salmonella & Shigella	4437	846	3552	39	16,001
	E. coli	1306	166	1140		1306
GENERAL BACTERIOLOGY	Cultures - Isolation	140	55	82	7	3526
	Cultures - Confirmation	1211	1038	71	104	26,531
FOOD BACTERIOLOGY	Cultures	181	16	152	14	987
STAPHYLOCOCCUS	Cultures - Isolation	557	169	388		557
	Cultures - Confirmation	91	90	1		91
STREPTOCOCCUS	Cultures	35,855	2465	33,333	57	67,871
DIPHTHERIA	Cultures - Isolation	243		243		486
	Cultures - Confirmation	2	1	1		4
TUBERCULOSIS	Microscopic Smears	34,837	1103	33,239	495	34,342
	Cultures - Confirmation	885	xxxxxx	xxxxxx	xxxx	7965
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	137,368
MYCOLOGY	Cultures	4946	xxxxxx	xxxxxx	xxxx	39,568
VENEREAL DISEASES	Veneral Smears	9106	2041	6989	77	9099
	Blood - VDRL Test	357,987	8240	340,653	2687	375,066
	W.R. Total 6401	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	40,087	276	39,052	208	41,100
	W.R. Total 550	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL	2455	14	2393	48	2468
	Spinal Fluid - Total Protein		338	645	1422	2405
	FTA - Blood	3594	2202	1260	36	3843
	FTA Borderline 96	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	334,807	23,216	306,227	5359	337,429
SPECIAL SEROLOGY	HI Rubella	13,639				13,921
	HA Amebiasis, Influenza	384				384
	Bacterial Agglutinations	83	xxxxxx	xxxxxx	xxxx	122
	Brucella	xxxxxx	2	61		xxxxxx
	Tularemia	xxxxxx		59		xxxxxx
	CF Viral, Fungal, Rickettsial	8146	xxxxxx	xxxxxx	xxxx	39,812
	Agar Gel Fungal	xxxxxx				2379
GENETIC DISEASES	PKU Screening	97,456				97,456
	PKU Chemistry	323				578
	Hemoglobinopathies	64,510				72,716
	Hypothyroid T_4, TSH	66,671				71,231
CYTOLOGY	Smears	14,927				15,346
WATER	Lactose - MPN	624	194	105	7	1017
	Membrane Filter	81,304	9113	68,729	3438	79,454
	Chemistry		799	77,659	1997	79,050
	Dilutions					1889
MILK PRODUCTS	Milks	19,025	xxxxxx	xxxxxx	xxxx	69,477
	Other	17,468	xxxxxx	xxxxxx	xxxx	40,735
SEA FOODS	Oyster - Plate Count	477	xxxxxx	xxxxxx	xxxx	477
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	1448
RABIES	Smears - Negri Bodies					
	FA Examinations	2949	73	2815	61	2904
VIRUS ISOLATION	Cultures	850	93	750	7	1941
Rh Factor	Blood	10,936	xxxxxx	xxxxxx	xxxx	14,589
LEAD DETECTION	Blood	4859	xxxxxx	xxxxxx	xxxx	5860
GLUCOSE	Blood	2660	xxxxxx	xxxxxx	xxxx	2663
CHECK SPECIMENS		1194	xxxxxx	xxxxxx	xxxx	3698
MISCELLANEOUS		2292				2972
TOTALS		1,269,892	55,709	941,816	17077	1,756,408

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

January 1 - October 31

LABORATORY Anniston

REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa					
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	32	17	14	1	31
	Blood - VDRL Test	8,940	235	8,496	32	9,320
	W.R. Total 177	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	1,517	19	1,453	11	1,584
	W.R. Total 34	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	16,282	817	15,070	395	15,991
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN	48				96
	Membrane Filter	7,542	668	6,709	165	7,377
	Chemistry		152	7,136	165	7,377
	Dilutions					27
MILK PRODUCTS	Milks	1,999	xxxxxx	xxxxxx	xxxx	8,098
	Other	2,054	xxxxxx	xxxxxx	xxxx	4,428
SEA FOODS	Oyster - Plate Count	94	xxxxxx	xxxxxx	xxxx	94
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	188
RABIES	Smears - Negri Bodies					
	FA Examinations	173	3	165	5	167
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS	Sero. (40) GC (10) Rabies (10) Food(4)	64	xxxxxx	xxxxxx	xxxx	142
MISCELLANEOUS	Ticks for ID (2)	2				2
TOTALS		38,747	1,911	39,043	774	54,922

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Decatur

REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa	1763	166	1545	52	1711
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	16	2	13	1	15
	Blood - VDRL Test	35,712	493	34,739	145	36,490
	W.R. Total 328	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	1687	13	1642	14	1704
	W.R. Total 17	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	9016	754	8128	134	8882
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN					
	Membrane Filter	10,276	1310	8601	365	9911
	Chemistry		110	9835		9911
	Dilutions					141
MILK PRODUCTS	Milks	2115	xxxxxx	xxxxxx	xxxx	8504
	Other	2067	xxxxxx	xxxxxx	xxxx	5863
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations	300	11	273	16	284
VIRUS ISOLATION	Cultures					
Rh Factor	Blood	1832	xxxxxx	xxxxxx	xxxx	2392
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS		100	xxxxxx	xxxxxx	xxxx	105
MISCELLANEOUS		11				11
TOTALS		64,895	2,859	64,776	727	86,124

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Dothan REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa					
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears					
	Blood - VDRL Test					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	10,577	842	9,566	169	11,197
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN					
	Membrane Filter	6,960	567	6,019	374	6,633
	Chemistry		161	6,527	272	7,195
	Dilutions					5
MILK PRODUCTS	Milks	952	xxxxxx	xxxxxx	xxxx	4,242
	Other	1,242	xxxxxx	xxxxxx	xxxx	2,656
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations					
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS		32	xxxxxx	xxxxxx	xxxx	32
MISCELLANEOUS		10				10
TOTALS		19,773	1,570	22,112	815	31,970

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

January 1 - October 31

LABORATORY Huntsville REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa	752	89	655	8	744
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	183	47	128	8	182
	Blood - VDRL Test	28,137	544	27,093	157	29,084
	W.R. Total 343	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	1,556	10	1,523	5	1,579
	W.R. Total 18	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	15,145	1,125	13,745	275	15,145
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN	225	150	74	1	224
	Membrane Filter	5,704	577	4,916	211	5,493
	Chemistry		20	5,697	212	5,717
	Dilutions					
MILK PRODUCTS	Milks	1,295	xxxxxx	xxxxxx	xxxx	4,900
	Other	1,637	xxxxxx	xxxxxx	xxxx	3,231
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations	295	5	288	2	293
VIRUS ISOLATION	Cultures					
Rh Factor	Blood	9,104	xxxxxx	xxxxxx	xxxx	11,997
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood	2,660	xxxxxx	xxxxxx	xxxx	2,663
CHECK SPECIMENS	VDRL 50 GC 25 Rabies 20	95	xxxxxx	xxxxxx	xxxx	122
MISCELLANEOUS	S.B. Sterile Bottles	158				158
TOTALS		66,946	2,567	54,119	879	81,532

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Mobile REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa	3,781	464	3,257	60	3,721
	Toxoplasma					
	Malaria	2		2		2
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures	3,272	686	2,585	1	3,649
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	1,256	399	853	4	1,252
	Blood - VDRL Test	53,452	1,647	50,758	218	56,570
	W.R. Total 830	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	6,358	39	6,236	13	6,563
	W.R. Total 70	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	50,293	3,617	46,114	562	50,293
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN	276			6	565
	Membrane Filter	13,369	1,046	11,865	458	12,911
	Chemistry		54	12,912	403	12,966
	Dilutions					496
MILK PRODUCTS	Milks	1,860	xxxxxx	xxxxxx	xxxx	6,406
	Other	1,109	xxxxxx	xxxxxx	xxxx	2,325
SEA FOODS	Oyster - Plate Count	228	xxxxxx	xxxxxx	xxxx	228
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	950
RABIES	Smears - Negri Bodies					
	FA Examinations	257	1	247	9	248
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS		117	xxxxxx	xxxxxx	xxxx	149
MISCELLANEOUS						
TOTALS		135,630	7,953	134,829	1,734	161,272

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Central

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Montgomery REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO. EXAMS
PARASITOLOGY	Helminths & Protozoa	18,504	1977	15,650	877	18,512
	Toxoplasma	1570	456	1097	17	1570
	Malaria	14	4	10		14
ENTERIC BACTERIOLOGY	Salmonella & Shigella	4437	848	3552	39	16,001
	E. coli	1306	166	1140		1306
GENERAL BACTERIOLOGY	Cultures - Isolation	140	55	82	7	3526
	Cultures - Confirmation	1211	1038	71	104	26,531
FOOD BACTERIOLOGY	Cultures	181	16	152	14	987
STAPHYLOCOCCUS	Cultures - Isolation	557	169	388		557
	Cultures - Confirmation	91	90	1		91
STREPTOCOCCUS	Cultures	32,583	1779	30,748	56	62,222
DIPHTHERIA	Cultures - Isolation	243		243		486
	Cultures - Confirmation	2	1	1		4
TUBERCULOSIS	Microscopic Smears	34,837	1103	33,239	495	34,342
	Cultures - Confirmation	885	xxxxxx	xxxxxx	xxxx	7965
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	137,368
MYCOLOGY	Cultures	4946	xxxxxx	xxxxxx	xxxx	39,568
VENEREAL DISEASES	Veneral Smears	1682	591	1045	47	1682
	Blood - VDRL Test	102,789	3542	95,053	1081	110,934
	W.R. Total 3113	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital	10,419	117	9927	112	10,947
	W.R. Total 263	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL	2405	14	2344	47	2419
	Spinal Fluid - Total Protein		338	645	1422	2405
	FTA - Blood	3594	2202	1260	36	3843
	FTA Borderline 96	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	66,106	5304	59,792	1012	66,106
SPECIAL SEROLOGY	HI Rubella	13,639				13,921
	HA Amebiasis, Influenza	384				384
	Bacterial Agglutinations	83	xxxxxx	xxxxxx	xxxx	122
	Brucella	xxxxxx	2	61		xxxxxx
	Tularemia	xxxxxx		59		xxxxxx
	CF Viral, Fungal, Rickettsial	8146	xxxxxx	xxxxxx	xxxx	39,812
	Agar Gel Fungal	xxxxxx				2379
GENETIC DISEASES	PKU Screening	97,456				97,456
	PKU Chemistry	323				578
	Hemoglobinopathies	64,510				72,716
	Hypothyroid T_4, TSH	66,671				71,231
CYTOLOGY	Smears	14,927				15,346
WATER	Lactose - MPN					
	Membrane Filter	13,965	1534	11,538	869	13,965
	Chemistry		84	13,011	870	13,050
	Dilutions					203
MILK PRODUCTS	Milks	2765	xxxxxx	xxxxxx	xxxx	11,245
	Other	1927	xxxxxx	xxxxxx	xxxx	5029
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations	1327	51	1263	13	1327
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood	4859	xxxxxx	xxxxxx	xxxx	5860
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS		655	xxxxxx	xxxxxx	xxxx	1735
MISCELLANEOUS		899				1120
TOTALS		581,038	21,481	282,372	7118	916,865

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

January 1 - September 30

LABORATORY Selma

REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO.EXAMS
PARASITOLOGY	Helminths & Protozoa					
	Toxoplasma					
	Malaria					
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears					
	Blood - VDRL Test					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	11,099	913	10,162	24	11,988
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN					
	Membrane Filter	4,379	838	3,357	184	4,304
	Chemistry		29	4,271		4,300
	Dilutions					418
MILK PRODUCTS	Milks	939	xxxxxx	xxxxxx	xxxx	3,971
	Other	920	xxxxxx	xxxxxx	xxxx	2,279
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations					
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS	Diphtheria		xxxxxx	xxxxxx	xxxx	10
MISCELLANEOUS	Lactose - 59 B. Green - 53					112
TOTALS		17,337	1,780	17,790	208	27,382

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LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

January 1 - October 31

LABORATORY Tuscaloosa

REPORT FOR PERIOD Annual 1979

		SPECIMENS	POSITIVE	NEGATIVE	UNSAT	NO.EXAMS
PARASITOLOGY	Helminths & Protozoa					
	Toxoplasma					
	Malaria	2	1	1		2
ENTERIC BACTERIOLOGY	Salmonella & Shigella					
	E. coli					
GENERAL BACTERIOLOGY	Cultures - Isolation					
	Cultures - Confirmation					
FOOD BACTERIOLOGY	Cultures					
STAPHYLOCOCCUS	Cultures - Isolation					
	Cultures - Confirmation					
STREPTOCOCCUS	Cultures					
DIPHTHERIA	Cultures - Isolation					
	Cultures - Confirmation					
TUBERCULOSIS	Microscopic Smears					
	Cultures - Confirmation		xxxxxx	xxxxxx	xxxx	
	Cultures - General	xxxxxx	xxxxxx	xxxxxx	xxxx	
MYCOLOGY	Cultures		xxxxxx	xxxxxx	xxxx	
VENEREAL DISEASES	Veneral Smears	3		3		3
	Blood - VDRL Test					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Blood - Premarital					
	W.R. Total	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	Spinal Fluid VDRL					
	Spinal Fluid - Total Protein					
	FTA - Blood					
	FTA Borderline	xxxxxx	xxxxxx	xxxxxx	xxxx	xxxxxx
	GC Cultures	26,457	1,538	24,397	515	27,995
SPECIAL SEROLOGY	HI Rubella					
	HA Amebiasis, Influenza					
	Bacterial Agglutinations		xxxxxx	xxxxxx	xxxx	
	Brucella	xxxxxx				xxxxxx
	Tularemia	xxxxxx				xxxxxx
	CF Viral, Fungal, Rickettsial		xxxxxx	xxxxxx	xxxx	
	Agar Gel Fungal	xxxxxx				
GENETIC DISEASES	PKU Screening					
	PKU Chemistry					
	Hemoglobinopathies					
	Hypothyroid T_4, TSH					
CYTOLOGY	Smears					
WATER	Lactose - MPN					
	Membrane Filter	5,365	794	4,496	75	5,853
	Chemistry		27	5,263	75	5,365
	Dilutions					422
MILK PRODUCTS	Milks	1,714	xxxxxx	xxxxxx	xxxx	3,924
	Other	1,062	xxxxxx	xxxxxx	xxxx	2,165
SEA FOODS	Oyster - Plate Count		xxxxxx	xxxxxx	xxxx	
	Oyster - Fecal Coliform		xxxxxx	xxxxxx	xxxx	
RABIES	Smears - Negri Bodies					
	FA Examinations					
VIRUS ISOLATION	Cultures					
Rh Factor	Blood		xxxxxx	xxxxxx	xxxx	
LEAD DETECTION	Blood		xxxxxx	xxxxxx	xxxx	
GLUCOSE	Blood		xxxxxx	xxxxxx	xxxx	
CHECK SPECIMENS	G.C.	10	xxxxxx	xxxxxx	xxxx	30
MISCELLANEOUS	Mosquito larvae 278 spider 1	279				279
TOTALS		34,892	2,360	34,160	665	46,038

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BUREAU OF DENTAL HEALTH

The Bureau of Dental Health reorganized in 1979 from four to two divisions. The former Division of Preventive Dentistry was combined with the Division of Dental Health Education to form a single Division of Dental Health Education and Prevention. The activities of the Division of Dental Projects and Research were absorbed under the bureau's administrative activities.

The bureau's staff changed during the year when two dental education consultants were employed to replace two who had resigned. One vacancy in this category of employee still exists in the bureau's staffing pattern.

The Division of Dental Services continued its dental care and treatment program through its mobile dental health unit trailers and fixed county dental clinics.

Three nursing homes received inservice training for their staffs and aids on the latest techniques for proper oral hygiene care for their patients and a hospital residency program.

Several area vocational schools received dental health education training for their staffs and students during 1979.

New inroads were made into dental health educational training with the initiation of a pilot project for junior and senior high students.

Fluoridation

An all time record for fluoridation was set during 1979. Fluoridation was approved by 19 city councils or commissions.

- Birmingham
- Gadsden
- Selma
- Prattville
- Prichard
- Greensboro
- Monroeville
- Saraland
- Satsuma
- Geneva
- Hartford
- Lineville
- Ashland
- Heflin
- Guin
- Winfield
- Red Bay
- Luverne
- Brantley

The water systems authorized by these cities serve approximately one million persons. It is expected that all systems will be in operation by the end of 1980. Selma has already begun to fluoridate.

During 1979 three cities began fluoridation—Montgomery, Selma, and Talladega. These systems serve over 200,000. Thus, the total Alabama population on fluoridated water now exceeds 1,600,000.

A federal grant was received in the amount of $158,314 which will cover the cost of equipment and a one-year supply of chemical for fifteen of the nineteen cities listed above. Also, equipment and chemical will be provided for Pell City which approved fluoridation several years ago. Funds will also be provided to replace inoperable equipment in Trussville, Evergreen, Jacksonville, and Montevallo.

Fluoride Mouthrinse

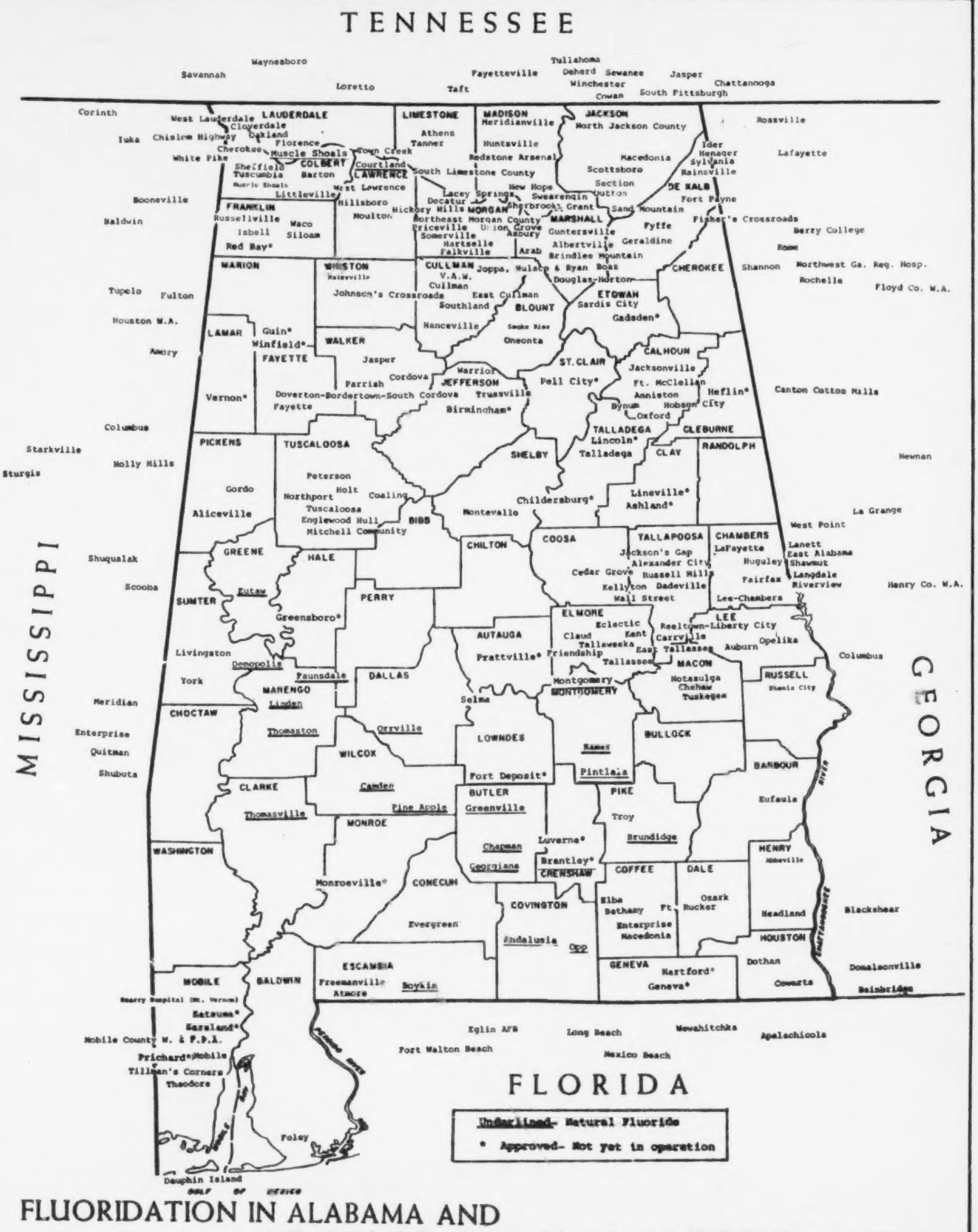
Sodium fluoride mouthrinse programs in the schools have been proven to be an effective and safe dental caries preventive procedure in areas that do not have natural or community water fluoridation.

The incidence of dental caries can be reduced as much as 30% to 45% through the classroom fluoride mouthrinse program. The mouthrinse program consists of a weekly rinsing of 60 seconds duration and can easily be administered with minimal interruption of a school's academic program.

The in-school program has grown from 26 teachers and 550 students participating in the pilot program in 1977 to 387 teachers and 8,908 students participating in seven school systems in 1979.

INCREASE IN PARTICIPATION IN FLUORIDE MOUTHRINSE PROGRAM

Year	PARTICIPANTS		School Systems
	Teachers	Students	
1977	26	550	1
1978	90	2,300	1
1979	387	8,908	7


TENNESSEE
Waynesboro
Savannah
Loretto
Fayetteville
Taft
Tullahoma
Deherd
Sewanee
Winchester
Cowan
Jasper
Chattanooga
South Pittsburgh
Corinth
Iuka
West Lauderdale
LAUDERDALE
Cloverdale
Chisleм Highway
Oakland
Cherokee
Florence
White Pike
Muscle Shoals
Sheffield
Tuscumbia
Muscle Shoals
COLBERT
Barton
Town Creek
Courtland
LAWRENCE
West Lawrence
Littleville
Hillsboro
Moulton
LIMESTONE
Athens
Tanner
South Limestone County
MADISON
Meridianville
Huntsville
Redstone Arsenal
New Hope
JACKSON
North Jackson County
Macedonia
Scottsboro
Section
Dutton
Rossville
Lafayette
Ider
Henagar
Sylvania
Rainsville
DE KALB
Fort Payne
Sand Mountain
Fyffe
Fisher's Crossroads
Geraldine
Berry College
Rome
Booneville
Baldwin
FRANKLIN
Russellville
Isbell
Red Bay*
Waco
Siloam
Lacey Springs
Decatur
Hickory Hills
MORGAN
Northeast Morgan County
Priceville
Union Grove
Somerville
Hartselle
Falkville
Swearengin
Sherbrook
Grant
Asbury
MARSHALL
Guntersville
Albertville
Arab
Brindlee Mountain
Boaz
Joppa
Mulaco & Ryan
Douglas-Horton
CHEROKEE
Shannon
Northwest Ga. Reg. Hosp.
Rochelle
Floyd Co. W.A.
MARION
WINSTON
Haleyville
CULLMAN
V.A.W.
Cullman
Johnson's Crossroads
East Cullman
Southland
BLOUNT
ETOWAH
Sardis City
Gadsden*
Tupelo
Fulton
Houston W.A.
Amory
LAMAR
Guin*
Winfield*
FAYETTE
WALKER
Hanceville
Snead Elec
Oneonta
Jasper
Cordova
Parrish
Warrior
JEFFERSON
Trussville
ST. CLAIR
Pell City*
CALHOUN
Jacksonville
Ft. McClellan
Anniston
Heflin*
Hobson City
Bynum
Oxford
Canton Cotton Mills
Vernon*
Doverton-Bordertown-South Cordova
Fayette
Birmingham*
Columbus
Starkville
Sturgis
Holly Hills
PICKENS
Gordo
Aliceville
TUSCALOOSA
Peterson
Holt
Northport
Coaling
Tuscaloosa
Englewood Hull
Mitchell Community
BIBB
SHELBY
TALLADEGA
Lincoln*
Talladega
CLEBURNE
RANDOLPH
CLAY
Lineville*
Ashland*
Childersburg*
Montevallo
Newnan
La Grange
West Point
CHILTON
COOSA
TALLAPOOSA
Jackson's Gap
Alexander City
Cedar Grove
Russell Mills
Kellyton
Dadeville
Wall Street
CHAMBERS
LaFayette
Lanett
East Alabama
Huguley
Shawmut
Fairfax
Langdale
Riverview
Lee-Chambers
Henry Co. W.A.
Shuqualak
Scooba
MISSISSIPPI
GREENE
HALE
Eutaw
SUMTER
Greensboro*
PERRY
AUTAUGA
Prattville*
ELMORE
Eclectic
Claud
Kent
Tallaweeka
Friendship
East Tallassee
Tallassee
Reeltown-Liberty City
Carrville
LEE
Auburn
Opelika
Columbus
Livingston
Demopolis
York
Faunsdale
MARENGO
Linden
DALLAS
Selma
Montgomery
MONTGOMERY
MACON
Notasulga
Chehaw
Tuskegee
RUSSELL
Phenix City
GEORGIA
Meridian
Enterprise
Quitman
Shubuta
CHOCTAW
Thomaston
Orrville
WILCOX
Camden
LOWNDES
Fort Deposit*
Ramer
Pintlala
BULLOCK
BARBOUR
Eufaula
CLARKE
Thomasville
Pine Apple
BUTLER
Greenville
PIKE
Troy
Brundidge
MONROE
Luverne*
Chapman
Georgiana
Brantley*
CRENSHAW
COFFEE
DALE
HENRY
Abbeville
WASHINGTON
Monroeville*
CONECUH
Evergreen
COVINGTON
Andalusia
Opp
Elba
Bethany
Ft. Rucker
Ozark
Enterprise
Macedonia
Headland
HOUSTON
Dothan
Cowarts
Blackshear
Donalsonville
Bainbridge
CHATTAHOOCHEE RIVER
GENEVA
Hartford*
Geneva*
MOBILE
BALDWIN
ESCAMBIA
Freemanville
Atmore
Boykin
Searcy Hospital (Mt. Vernon)
Satsuma*
Saraland*
Mobile County W. & F.P.A.
Prichard*
Mobile
Tillman's Corners
Theodore
Foley
Dauphin Island
GULF OF MEXICO
PERDIDO RIVER
Eglin AFB
Fort Walton Beach
Long Beach
Mexico Beach
Wewahitchka
Apalachicola
FLORIDA
Underlined- Natural Fluoride
* Approved- Not yet in operation

FLUORIDATION IN ALABAMA AND NEARBY COMMUNITIES IN ADJOINING STATES

The mouthrinse program is being eagerly accepted by school administrators, teachers, parents, and children. Contacts have been made, and the preliminary indications are that increasing numbers of students will participate in the program in 1980.

Division of Dental Health Education

1979 was another prosperous year for the Division of Dental Health Education of the Bureau of Dental Health (BDH). There were seven school systems which were first-time recipients of the Alabama Smile Keeper (ASK) dental health education program while two systems received the program on a second-visit basis. Oral hygiene material, educational literature and classroom instruction were delivered to 26,122 kindergarten-6th graders and some head start children during the year. A total of 1,087 Alabama teachers taught the ASK program to the large number of students. To date, 84 of the 127 Alabama school systems have received comprehensive dental health instruction since the program's inception in 1974.

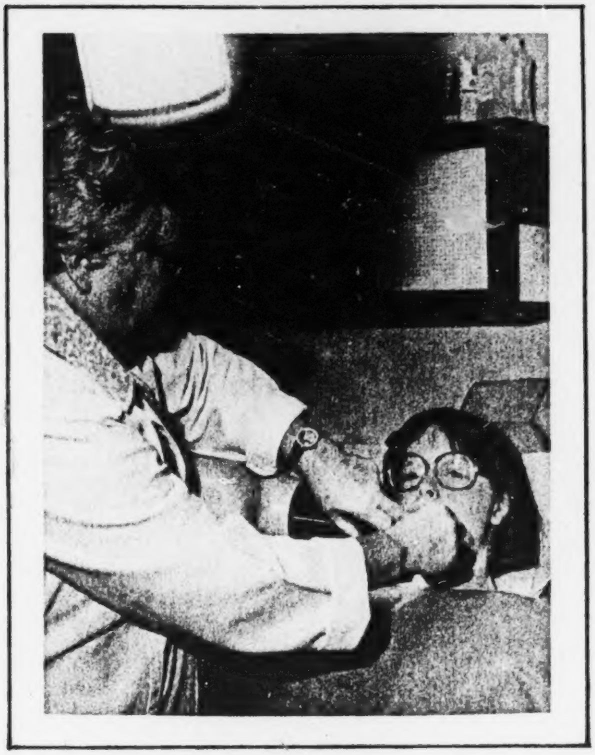
Combined efforts from local dental professionals, school representatives, dental auxiliary societies, county health department employees, charity leagues and other supportive groups enabled the Bureau of Dental Health to achieve its yearly goals. While budget restraints and staff cut backs impaired manpower, volunteers assisted with program activities, and projections for the year never faltered.

Parental involvement was evident again. Some parents attended teacher workshops and learned first hand what their children were to learn at school. On other occasions, mothers volunteered to assist bureau consultants with classroom plaque removal instruction.

During the summer, Camp Exchange youths received dental knowledge for the third consecutive year. Poarch Community residents also received indepth preventive instruction as one dental education consultant spent a week there in conjunction with the mobile dental health unit treatment program.

Two health fairs in the state were represented during the year. Athens State College used ASK materials for its "Health Awareness Week" and the Smilemobile was utilized for several days at Montgomery's Eastdale Mall health fair.

KEEP A SMILE ON THE FACE OF ALABAMA
ALABAMA
ASK
SMILE KEEPER
THE SMILE



ASK DENTAL HEALTH EDUCATION PROGRAMS COMPLETED THROUGH DECEMBER 31, 1979

	Program Participants	
1979	Children	Teachers
Camp Exchange (statewide)	240	-0-
*Chilton County	1,000	32
Decatur City	3,800	200
Etowah County	5,062	203
*Florence City	525	21
Hale County	2,165	106
Birmingham City	1,200	40
Lowndes County	1,650	60
Macon County Head Start	425	25
Marshall County	4,755	175
Marshall County Head Start	300	-0-
Talladega County	5,000	225
Total 1979	26,122	1,087
Total through 1978	187,199	7,596
Total to date	213,321	8,683

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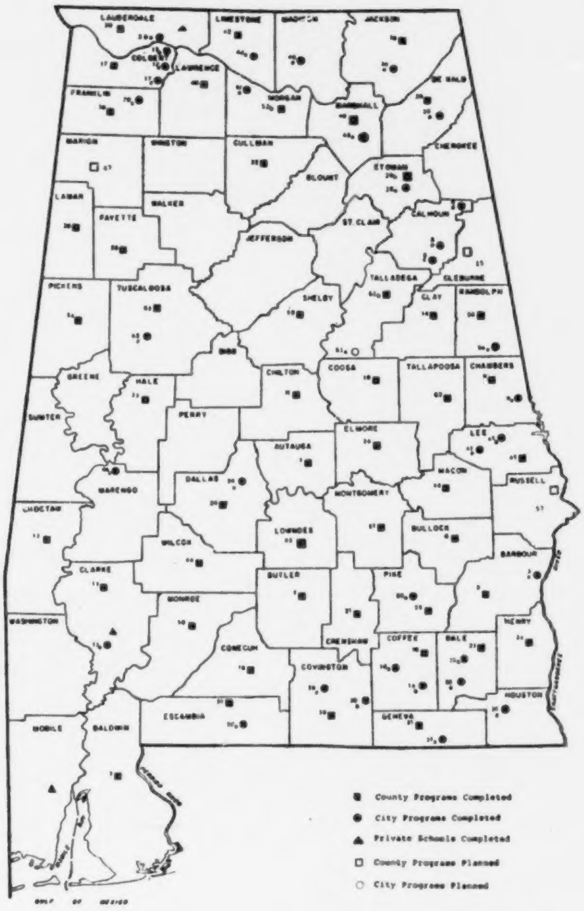
*Second Visit.

ASK TEACHER-TRAINING WORKSHOPS PRESENTED TO ALABAMA COUNTY AND CITY SCHOOL SYSTEMS
1979


LAUDERDALE
LIMESTONE
MADISON
JACKSON
COLBERT
LAWRENCE
FRANKLIN
MORGAN
MARSHALL
DE KALB
MARION
WINSTON
CULLMAN
CHEROKEE
ETOWAH
BLOUNT
LAMAR
WALKER
FAYETTE
CALHOUN
ST. CLAIR
JEFFERSON
PICKENS
TUSCALOOSA
TALLADEGA
CLEBURNE
SHELBY
CLAY
RANDOLPH
BIBB
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
GREENE
HALE
PERRY
SUMTER
LEE
AUTAUGA
ELMORE
MACON
RUSSELL
DALLAS
MARENGO
MONTGOMERY
CHOCTAW
LOWNDES
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE
MONROE
WASHINGTON
CRENSHAW
COFFEE
DALE
HENRY
CONECUH
COVINGTON
HOUSTON
ESCAMBIA
GENEVA
MOBILE
BALDWIN
GULF OF MEXICO
■ County Programs Completed
● City Programs Completed
▲ Private Schools Completed
□ County Programs Planned
○ City Programs Planned

SCHOOL SYSTEM

1. Autauga County
2. Baldwin County
3. Barbour County
   a. Eufaula City
4. Bibb County
5. Blount County
   a. Oneonta City
6. Bullock County
7. Butler County
8. Calhoun County
   a. Anniston City
   b. Jacksonville City
   c. Oxford City
   d. Piedmont City
9. Chambers County
   a. Lanett City
10. Cherokee County
11. Chilton County
12. Choctaw County
13. Clarke County
   a. Thomasville City
14. Clay County
15. Cleburne County
16. Coffee County
   a. Elba City
   b. Enterprise City
17. Colbert County
   a. Muscle Shoals City
   b. Sheffield City
   c. Tuscumbia City
18. Conecuh County
19. Coosa County
20. Covington County
   a. Andalusia City
   b. Florala City
   c. Opp City
21. Crenshaw County
22. Cullman County
   a. Cullman City
23. Dale County
   a. Daleville City
   b. Ozark City
24. Dallas County
   a. Selma City
25. DeKalb County
   a. Fort Payne City
26. Elmore County
   a. Tallassee City
27. Escambia County
   a. Brewton City
28. Etowah County
   a. Attalla City
   b. Gadsden City
29. Fayette County
30. Franklin County
   a. Russellville City
31. Geneva County
   a. Geneva City
32. Greene County
33. Hale County
34. Henry County
35. Houston County
   a. Dothan City
36. Jackson County
   a. Scottsboro City
37. Jefferson County
   a. Bessemer City
   b. Birmingham City
   c. Fairfield City
   d. Homewood City
   e. Midfield City
   f. Mt. Brook City
   g. Tarrant City
   h. Vestavia Hills City
38. Lamar County
39. Lauderdale County
   a. Florence City
40. Lawrence County
41. Lee County
   a. Auburn City
   b. Opelika City
42. Limestone County
   a. Athens City
43. Lowndes County
44. Macon County
45. Madison County
   a. Huntsville City
46. Marengo County
   a. Demopolis City
   b. Linden City
47. Marion County
   a. Winfield City
48. Marshall County
   a. Guntersville City
49. Mobile County
50. Monroe County
51. Montgomery County
52. Morgan County
   a. Decatur City
   b. Hartselle City
53. Perry County
   a. Marion City
54. Pickens County
55. Pike County
   a. Troy City
56. Randolph County
   a. Roanoke City
57. Russell County
   a. Phenix City
58. St. Clair County
59. Shelby County
60. Sumter County
61. Talladega County
   a. Sylacauga City
   b. Talladega City
62. Tallapoosa County
   a. Alexander City
63. Tuscaloosa County
   a. Tuscaloosa City
64. Walker County
   a. Carbon Hill City
   b. Jasper City
65. Washington County
66. Wilcox County
67. Winston County
   a. Haleyville City

Nursing Home Activities

Bureau staff members responded to requests from three Alabama nursing homes for inservice oral hygiene training during the year. Oral hygiene aids for use by nursing home patients were displayed and demonstrated, slide presentation was made and question-and-answer period followed. Personnel attending the training session were given a copy of the 16-page "Nursing Home Manual" developed by the bureau.

In one county a local dentist and hygienist attended the entire training session to provide technical information and guidance for the trainees.

There were 59 nursing home staff trained during the three sessions. This enabled them to better serve the oral hygiene needs of 284 residents in the nursing home facilities.

Pilot Junior-Senior High School Program

A pilot dental health education program for junior-senior high school students (grades 7-12) was implemented in one school in Montgomery County with implementation in three other school systems in Colbert County scheduled for summer 1980.

Students at this age level are often in great need of sound dental health information. Poor diet and improper oral hygiene habits leading to dental decay and periodontal disease make this age group a prime target for better dental health awareness.

A junior-senior high school instructional unit has been developed as a supplement to the Alabama Teacher's Guide, along with a pamphlet-workbook for this age level.

Materials contained throughout the supplemental teaching unit can be effectively incorporated into science and hygiene courses, economics-business, social studies, physical education and English courses—giving the student a well-rounded knowledge of dental health education to carry over into adulthood.

Gradual integration of the junior-senior high school dental health education program is expected throughout the state if the pilot program is a success.

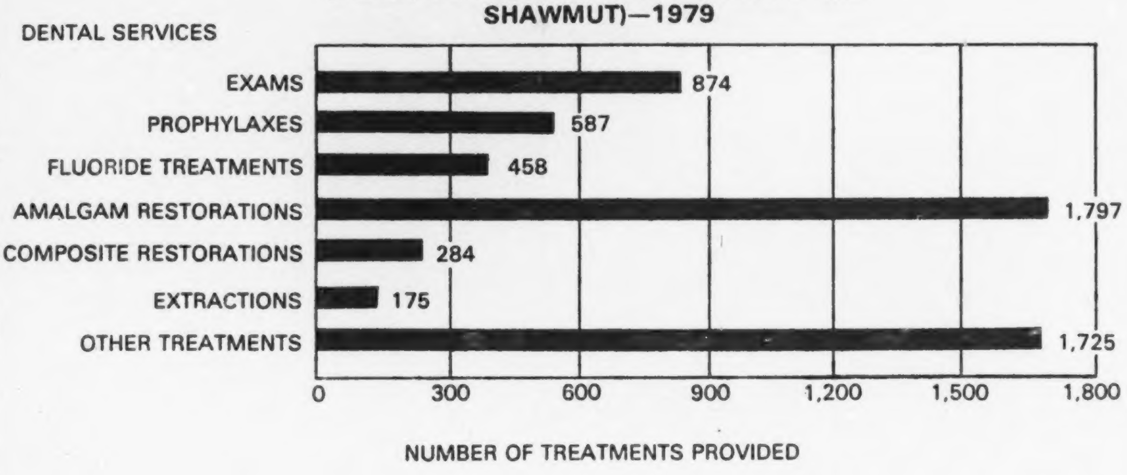
Dental Health Education in Area Vocational Schools

Dental educational consultants from the bureau conducted dental health education workshops in Hale County, Chambers County and Bullock County area vocational schools. Over 100 high school students in the health occupations field participated.

The students received information on maintaining their own oral hygiene as well as dental care in nursing homes, and information on dental specialties and careers in the dental health field.

Some of these students have, under direct supervision, helped with the dispensing and administration of the fluo-

CHART 1
MOBILE DENTAL HEALTH UNIT PROJECTS
(CLANTON, MONTGOMERY, POARCH, AND
SHAWMUT)—1979



ride mouthrinse in certain local elementary schools and will be aiding the dental education consultants in follow-up plaque removal sessions in elementary grades.

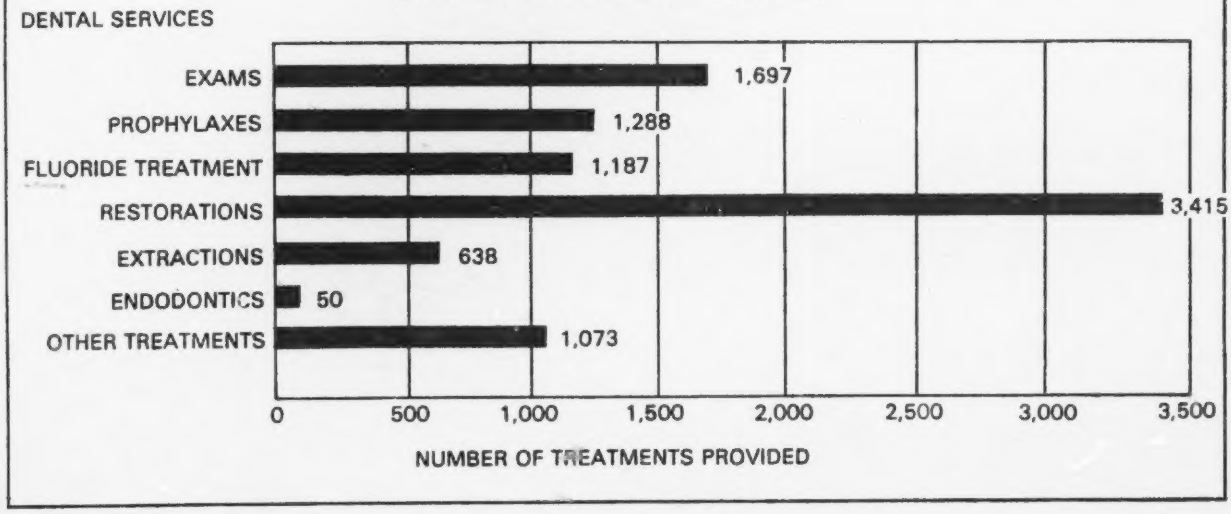
Division of Dental Services

Dental services were provided through the mobile dental health unit and with financial support to 19 counties. Chart 1 shows the mobile dental health unit activities during 1979. Chart 2 shows activities in the 13 fixed county health department dental clinics. Financial and administrative support were given to Colbert, Franklin, Jefferson, Lauderdale, Mobile and Tuscaloosa counties.

The mobile dental health unit served the elementary schools at Clanton, Alabama (Chilton County), seeing 405 children and finishing 77 of these. Shawmut Elementary School (Chambers County) reached its goal of 303 visits with 98 completions.

The mobile unit also provided dental treatment at the Montgomery County Health Department for five months of the year. This was a demonstration project in which 742 patients were seen with 194 completions made.

CHART 2
COUNTY DENTAL CLINIC SERVICES 1979
(INCLUDES THIRTEEN COUNTIES)



The Creek Indians at Poarch Community in Escambia County were given dental care for the fifth consecutive year. This continuous treatment has provided the young population of the community with the dental health care that their parents lacked. In Poarch 296 visits were made with 112 completions.

The need is great in all of the areas the dental trailer visited.

Table 1 shows the small percentage of completions compared to the large number of patient visits to the county clinics.

Lee County's 418 completions out of 953 patient visits is the result of a continuous program.

The Division of Dental Services of the bureau stresses a preventive approach to treatment with emphasis being given to the younger patients. The latest preventive techniques are taught to the children as they enter the treatment program. With such great numbers of children needing dental care and the bureau's limited time and funds, many of these children will only get education and prevention from the program.

The mobile dental health unit, with a full-time dentist, is working at full capacity. Total visits for 1979 were 1,866.

The other county clinics are very limited and must stay within their assigned allotments. The total visits to those clinics was 4,475. The number of patient visits for both the mobile dental health unit and the fixed county clinics totals 6,341.

With increased funding the county clinics could render more service.

TABLE 1

COUNTIES RECEIVING CLINICAL SUPPORT FROM BUREAU OF DENTAL HEALTH

COUNTY	PATIENT VISITS	PATIENTS COMPLETED
Baldwin	485	Unavailable
Bullock	228	6
Calhoun	178	29
Coffee	55	10
Dale	170	1
DeKalb	371	57
Etowah	145	8
Geneva	23	6
Lee	953	418
Macon	967	41
Madison	110	0
Walker	551	103
Washington	364	32
	4,485	711

ENVIRONMENTAL HEALTH ADMINISTRATION

The Environmental Health Administration Laboratory provided analytical support for the divisions of the Environmental Health Administration, the Alabama Water Improvement Commission and the Alabama Air Pollution Control Commission. The laboratory also provided services to county and local health agencies on a case by case basis.

During 1979 the Environmental Health Administration Laboratory processed 10,467 samples for chemical parameters. These samples required a total of 33,404 determinations. Table I summarizes the monthly activities of the laboratory and the organizations requesting service. As can be noted from the table the largest amount of work was performed for the Division of Public Water Supplies followed by the Alabama Water Improvement Commission and the Division of Solid Waste and Vector Control. Overall the 1979 workload was 20% higher than 1978.

Analytical Capabilities

General laboratory capabilities are listed on Table II. This spectrum of analytical capabilities was increased in 1979 to include several new organic parameters. The installation of a Finnigan 4000 series Gas Chromatograph-Mass Spectrograph has significantly improved the laboratory's organic analytical capabilities.

Radiological analytical capabilities of the laboratory were expanded to include the following radionuclides: Zn-65, Ru-106, Co-60, and H-3. Equipment modifications were made on the Canberra 2201 Alpha-Beta system to provide more productive machine utilization. A second improvement was the purchase and installation of a lithium drifted germanium detector. This system will provide an overall

TABLE I

ENVIRONMENTAL HEALTH LABORATORY
WORK LOAD

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
AIR POLLUTION													
Number of Samples	91	70	96	153	128	70	71	123	19	51	51	60	983
Number of Determinations	238	176	260	243	340	190	207	309	47	139	115	110	2,374
PUBLIC WATER SUPPLIES													
Number of Samples	275	159	528	352	233	410	226	196	136	250	121	188	3,074
Number of Determinations	1,389	925	2,713	2,149	940	1,873	519	516	308	556	363	676	12,927
RADIOLOGICAL HEALTH													
Number of Samples	115	43	239	82	70	65	81	58	259	76	37	74	1,199
Number of Determinations	432	103	284	346	185	125	311	103	265	122	57	124	2,457
WATER IMPROVEMENT COMMISSION													
Number of Samples	243	222	361	360	410	237	307	595	663	256	260	236	4,150
Number of Determinations	880	615	750	828	928	733	894	1,501	1,356	783	674	571	10,513
SOLID WASTE AND VECTOR CONTROL													
Number of Samples	36	112	118	71	98	56	147	66	97	52	98	41	992
Number of Determinations	282	158	431	266	426	356	692	446	620	366	687	272	5,002
WATER MISCELLANEOUS													
Number of Samples					21								21
Number of Determinations					21								21
Forensic Lab. Samples													
Forensic Lab. Determinations													
EPA-Samples	4						18						22
EPA-Determinations	4						18						22
Montg. Co. Health Samples	4												4
Montg. Co. Health Determinations	4												4
WIC 208 Project Samples							3	10	9				22
WIC 208 Project Determinations							24	30	30				84
TOTAL SAMPLES	768	606	1,342	1,018	960	838	853	1,048	1,183	685	567	599	10,467
TOTAL DETERMINATIONS	3,229	1,977	4,438	3,832	2,840	3,277	2,665	2,905	2,626	1,966	1,896	1,753	33,404

TABLE II
ENVIRONMENTAL HEALTH ADMINISTRATION LABORATORY PARAMETERS

ORGANICS

I. Organochlorines
   1. Aldrin
   2. BHC (Lindane)
   3. DDD (o,p'; p,p')
   4. DDE (o,p'; p,p')
   5. DDT (o,p'; p,p')
   6. Chlordane
   7. Heptachlor
   8. Heptachlor Epoxide
   9. Methoxychlor
   10. Mirex
   11. Toxaphene
   12. PCB's (1016, 1254, 1260, 1262, 1248, 1232, 1242, 1221)
   13. Dieldrin
   14. Endrin
   15. 2,4-D
   16. 2,4,5-TP

II. Organophosphates
   1. Diazinon
   2. Methyl Parathion
   3. Ethyl Parathion
   4. Malathion
   5. Ethion
   6. Malathion

III. Volatile Organics
   1. Chloroform
   2. Bromoform
   3. Bromodichloromethane
   4. Chlorodibromomethane
   5. 1,2 Dichloroethane
   6. 1,1,1 Trichloroethane
   7. 1,1,2 Trichloroethylene
   8. Carbon tetrachloride
   9. 1,1,2,2 Tetrachloroethylene

INORGANICS

Minerals
p^H
Alkalinity
Sulfide
Oil and Grease
Chloride
Fluoride
Turbidity
Color
Cyanide
Phenol
Hardness
Total Suspended Solids
Total Dissolved Solids
Total Solids
Total Organic Carbon
Acidity
Specific Conductance
Sulfates
Carbon Dioxide

Metals
Al
Ag
Ca
As
Cd
Cr-T
Cr-VI
Cu
Fe
Mn
Ni
Pb
Zn
Hg
Ba
Se
Na
Mg

Nutrients
1. Nitrate–Nitrite
2. Ammonia–Nitrogen
3. Organic–Nitrogen
4. Total Phosphates
5. Ortho–Phosphates

Air
1. Air Sulfates
2. Air Stacks
3. Air Filter Lead

Demands
1. Biochemical Oxygen Demand
2. Chemical Oxygen Demand

RADIATION

Gross Alpha
1. Air
2. Water
3. Soil
4. Vegetation

Gross Beta
1. Air
2. Water
3. Soil
4. Vegetation

Gamma
Bi–214
Ba–140
Co–60
Cs–134
Cs–137
Ce–144
I–131
K–40
Ru–106
Th–232
Zn–65
Zr-Nb–95

Liquid Scintillation
Tritium

Specific Alpha
1. Ra–226-228

Specific Beta
1. Sr–89 & 90
   a. Milk
   b. Water
   c. Soil
   d. Vegetation

enhancement of qualitative and quantitative gamma spectroscopy capabilities.

Quality Control

Approximately 10% of the routine analyses were performed in duplicate as a measure to provide the best analytical data possible. Secondly, in-house prepared reference samples are analyzed with each set of samples.

Interlaboratory quality control was continued in 1979. Various cross check samples were analyzed by the laboratory. The annual Water Pollution Study of the Environmental Protection Agency is shown in Table III.

The laboratory's effort as the state's certifying agency for laboratories analyzing drinking water samples continued in 1979. The results of this effort will appear in a later report.

DIVISION OF GENERAL SANITATION

Responsibilities

The Division of General Sanitation is responsible for assuring that good sanitation is practiced in cities, new subdivisions, rural areas, and schools throughout the state. It advises county environmentalists, practicing engineers, architects and in a limited way anyone indicating a need for technical assistance in deciding upon ground absorption systems for sewage disposal. The Division formulates cooperative programs with federal, state and county agencies, as well as municipal, rural, school and subdivision sanitation.

Subdivision Approval Program

Alabama's economy, like that of the nation, decreased substantially during 1979. A reflection of this decline may be seen in the reduction of subdivision approvals over those granted during the previous year as demonstrated in Graph 1. A portion of the 1979 reduction of the number of subdivision approvals is due in part to the fact that the Jefferson County Board of Health began at mid-year to process all of their submittals "in house" without state involvement. The Jefferson County Board of Health assumed this position on processing of subdivision applications because of a decision rendered by the Jefferson County Circuit Court in 1979 in which the legality of Act No. 659, 1978 was upheld. Act No. 659 authorizes the Jefferson County Board of Health to adopt rules and regulations for construction and maintenance of sewage disposal systems constructed within subdivisions as well as rural areas within the county. The State Board of Health appealed the decision made by the lower court to the State Supreme Court and the case will be heard in March of 1980.

During 1979 the Division made 756 separate reviews of subdivision plans (348 preliminaries and 408 finals). Copies of approvals were sent to the local county health departments, Housing and Urban Development, Farmers Home Administration and the Veterans Administration—all of which cooperate in the program to control general sanitation practices in the development of subdivisions. Graph 1 indicates that new housing start-ups usually peak every six to seven years (not the six year span between peaks in 1972 and 1978).

Two sets of regulations which were the subject of two hearings held in November of 1978 were adopted by the State Board of Health in February 1979. One set of requirements dealt with the recording of subdivision developments where lot sizes would be in excess of three acres. The other proposed set of regulations established specific guidelines for the State Board of Health to grant full responsibility for the review and approval of a subdivision to the local health department. During the year the West Alabama District Health Department prepared a request for assuming full responsibility for the review and approval of subdivisions. The request will be acted upon by the State Board of Health in the Spring of 1980.

One new environmentalist was hired to work in the subdivision review section in November, 1979.

School Sanitation

Plans for water supply, food service facilities and wastewater disposal systems were approved for 87 schools during 1979 and an additional 105 sets of plans were held over into 1980. Lack of an adequate staff to review school plans during the first half of the year is responsible for the large number of plans being carried over into the new year.

Other Projects

Approvals were granted for 28 other projects (armories, recreational parks, small commercial buildings, and light industrial concerns) during the year. Sewage disposal for these projects was either by septic tank, municipal sewer, or an alternate (experimental) system. An additional four sets of plans were submitted but were not acted upon. The problem of how to handle sewage generated by laundromats, mortuaries, and rendering houses for meat processing where there is no live municipal sewer system continued to plague the division. Possible solutions to this problem are being studied by the division and some breakthrough may occur in 1980.

Special Activities

A number of new sewage treatment devices designed for the average home have recently been placed on the market. Property owners whose proposed subdivisions have been denied approval because of poor soil conditions or other factors are excited about the possibility of these new devices being a solution to the sewage disposal problem. The subdivision regulations that were adopted by the State Board of Health in October of 1978 allow the division to experiment under strict guidelines with some of these new devices. Under this arrangement several new systems were approved for use in the state.

One of these new sewage treatment methods consists of a specially prepared tile bed above the original ground surface. The system is known as a "mound system" and six of these projects were approved during the year. Only one mound was installed during 1979, and it replaced a failing conventional septic tank tile field for the Millbrook Middle School located in Millbrook, Alabama. The system serves a school enrollment of 400.

Several individual home aeration units were approved for installation at various locations in the state. These units were sold under the tradenames of JET, NUTT-SHELL, MULTI-FLO, and CROMAGLASS. An installation of the NUTT-SHELL system for a fast food restaurant located in Jefferson County proved unsatisfactory. Tests made on the effluent coming from the restaurant showed an extremely high BOD count. It is believed that the reason for the high BOD levels was due to the large volume of syrups used at the breakfast meal. The NUTT-SHELL system was also utilized for several installations for commercial buildings during 1979. The JET and MULTI-FLO systems were licensed for sales in the state during the latter portion of the year and consequently only one installation for each was made in 1979. Several installations including one for a shopping center in Walker County were approved for the CROMOGLASS unit. Inspections of these systems during the year indicated that the units were performing satisfactorily. The division will continue to monitor all of these installations during 1980 to see if they may offer a solution to several problems associated with conventional septic tank arrangements.

Hurricane Frederic devastated the gulf coast area in September of 1979. Almost all of the septic tank systems located in this area of the state suffered damage. Radical changes in the topography occurred especially in the coastal sands. Because of the substantial change in the landscape replacement installations for damaged septic tank systems presented a major health problem. The Mobile and Baldwin county health departments addressed this problem by adopting special regulations for the area.

The division also began the process of drafting new general regulations for septic tank installations during the year. It is hoped that these regulations will be finalized during 1980 after public hearings are held.

GRAPH 1
SUBDIVISION APPROVAL TRENDS

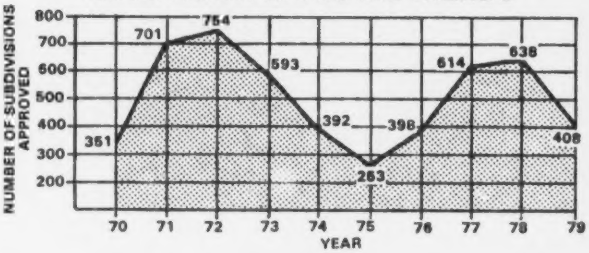
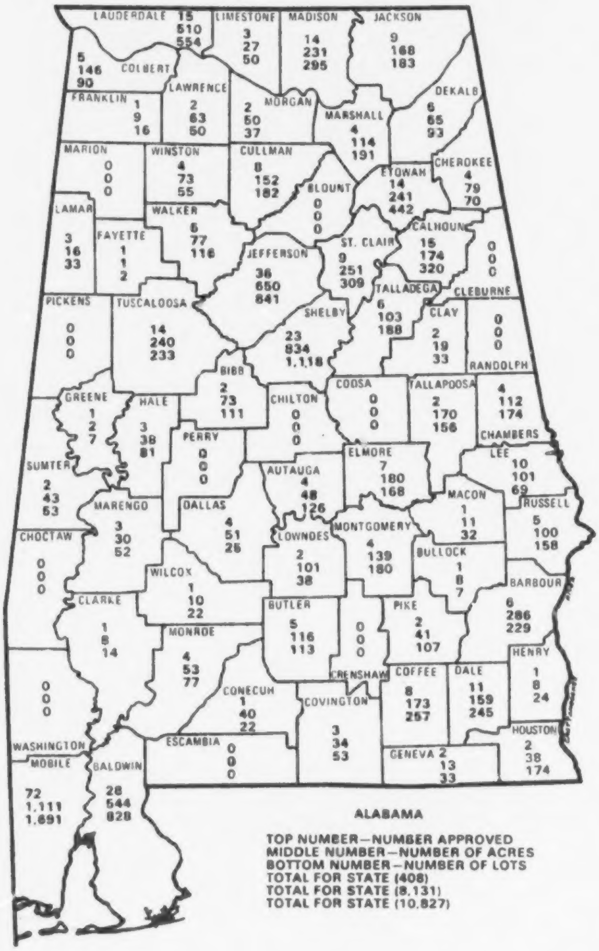
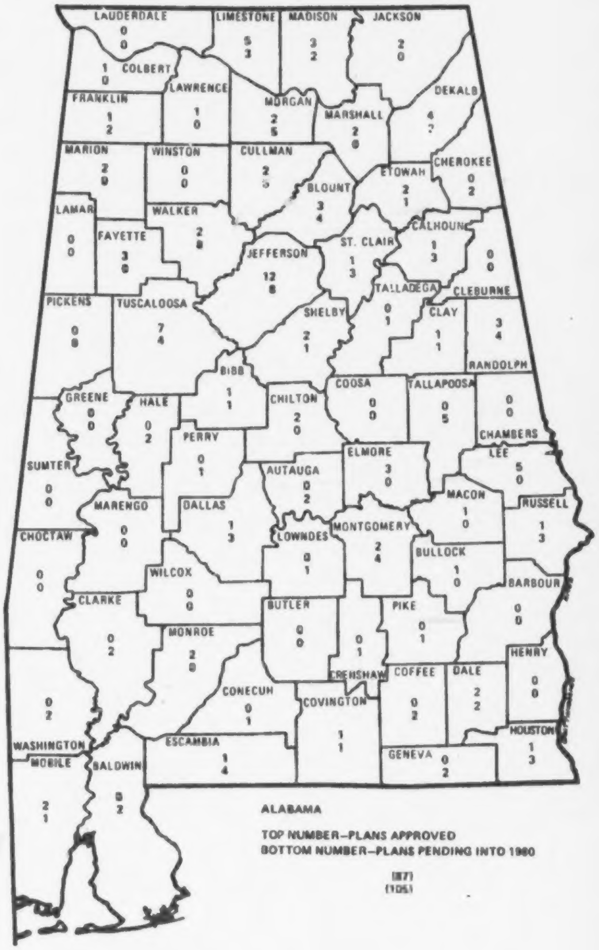


PLATE 1
APPROVED SUBDIVISIONS 1979


LAUDERDALE 15 510 554
LIMESTONE 3 27 50
MADISON 14 231 295
JACKSON 9 168 183
COLBERT 5 146 90
FRANKLIN 1 9 16
LAWRENCE 2 63 50
MORGAN 2 50 37
MARSHALL 4 114 191
DEKALB 6 65 93
MARION 0 0 0
WINSTON 4 73 55
CULLMAN 8 152 182
BLOUNT 0 0 0
ETOWAH 14 241 442
CHEROKEE 4 79 70
LAMAR 3 16 33
FAYETTE 1 1 2
WALKER 6 77 116
JEFFERSON 36 650 841
ST. CLAIR 9 251 309
CALHOUN 15 174 320
CLEBURNE 0 0 0
PICKENS 0 0 0
TUSCALOOSA 14 240 233
SHELBY 23 834 1,118
TALLADEGA 6 103 188
CLAY 2 19 33
RANDOLPH 0 0 0
BIBB 2 73 111
CHILTON 0 0 0
COOSA 0 0 0
TALLAPOOSA 2 170 156
CHAMBERS 4 112 174
GREENE 1 2 7
HALE 3 38 81
PERRY 0 0 0
SUMTER 2 43 53
AUTAUGA 4 48 126
ELMORE 7 180 168
LEE 10 101 69
MARENGO 3 30 52
DALLAS 4 51 25
MACON 1 11 32
RUSSELL 5 100 158
CHOCTAW 0 0 0
LOWNDES 2 101 38
MONTGOMERY 4 139 180
BULLOCK 1 8 7
WILCOX 1 10 22
BARBOUR 6 286 229
CLARKE 1 8 14
BUTLER 5 116 113
CRENSHAW 0 0 0
PIKE 2 41 107
MONROE 4 53 77
HENRY 1 8 24
COFFEE 8 173 257
DALE 11 159 245
CONECUH 1 40 22
COVINGTON 3 34 53
WASHINGTON 0 0 0
ESCAMBIA 0 0 0
GENEVA 2 13 33
HOUSTON 2 38 174
MOBILE 72 1,111 1,691
BALDWIN 28 544 828
ALABAMA

TOP NUMBER—NUMBER APPROVED
MIDDLE NUMBER—NUMBER OF ACRES
BOTTOM NUMBER—NUMBER OF LOTS
TOTAL FOR STATE (408)
TOTAL FOR STATE (8,131)
TOTAL FOR STATE (10,827)

PLATE 2
APPROVED SCHOOL PROJECTS
FOR 1979


LAUDERDALE 0 0
LIMESTONE 5 3
MADISON 3 2
JACKSON 2 0
COLBERT 1 0
FRANKLIN 1 2
LAWRENCE 1 0
MORGAN 2 5
MARSHALL 2 0
DEKALB 4 7
MARION 2 0
WINSTON 0 0
CULLMAN 2 5
BLOUNT 3 4
ETOWAH 2 1
CHEROKEE 0 2
LAMAR 0 0
FAYETTE 3 0
WALKER 2 8
JEFFERSON 12 8
ST. CLAIR 1 3
CALHOUN 1 3
CLEBURNE 0 0
PICKENS 0 8
TUSCALOOSA 7 4
SHELBY 2 1
TALLADEGA 0 1
CLAY 1 1
RANDOLPH 3 4
BIBB 1 1
CHILTON 2 0
COOSA 0 0
TALLAPOOSA 0 5
CHAMBERS 0 0
GREENE 0 0
HALE 0 2
PERRY 0 1
SUMTER 0 0
AUTAUGA 0 2
ELMORE 3 0
LEE 5 0
MARENGO 0 0
DALLAS 1 3
MACON 1 0
RUSSELL 1 3
CHOCTAW 0 0
LOWNDES 0 1
MONTGOMERY 2 4
BULLOCK 1 0
WILCOX 0 0
BARBOUR 0 0
CLARKE 0 2
BUTLER 0 0
CRENSHAW 0 1
PIKE 0 1
MONROE 2 0
HENRY 0 0
COFFEE 0 2
DALE 2 2
CONECUH 0 1
COVINGTON 1 1
WASHINGTON 0 2
ESCAMBIA 1 4
GENEVA 0 2
HOUSTON 1 3
MOBILE 2 1
BALDWIN 0 2
ALABAMA

TOP NUMBER—PLANS APPROVED
BOTTOM NUMBER—PLANS PENDING INTO 1980

(87)
(105)

DIVISION OF INSPECTION

Camp Sanitation

The food service facilities were routinely inspected with county environmentalists at the 94 resident camps located in Alabama. Division personnel met with camp operators interested in developing state regulations governing sanitation and safety for camps. Extension of sanitation or the development and application of specific regulations for camps does not appear feasible at this time.

Food Sanitation

The Regulations Governing the Manufacture, Preparation, Display and Service of Foods, Confections and Beverages were revised. Public hearings were held on January 5 in Montgomery and January 8 in Birmingham. The State Committee of Public Health adopted the regulations on May 16, 1979, and they became effective August 14, 1979. All licensing officials were notified of the adoption of these regulations in accordance with Section 22-20-5, Code of Alabama, 1975.

Two hours of instruction on the provisions of the revised regulations were presented at each of five meetings sponsored by the Alabama Environmental Health Association. The food program manager also discussed the provisions of the regulations at the annual meeting of the Alabama Restaurant and Food Service Association and during a one day workshop for food warehousemen in Birmingham.

Three division environmentalists were standardized and certified as food survey rating officers.

Food surveys were made in 27 counties. The average demerit score for 20 counties was 31. These surveys were made before the regulations were revised. The lowest demerit score for a county was 14. The highest demerit score was 51.

County	Demerit Score	Administrative Score
Autauga	31	66
Barbour	29.24	78
Bibb	26.4	84
Blount	44	49
Calhoun	76.64*	76
Cleburne	79*	80
Coosa	35	65
Dallas	45	72
Etowah	45.30	56
Fayette	23	76
Hale	33.36	83
Jackson	51	43
Jefferson	27	85
Lauderdale	34	85
Lawrence	22	80
Limestone	26	78
Lowndes	15.32	79
Marengo	30	80
Marion	86.4*	90
Marshall	43	69
Montgomery	81.9*	83
Randolph	23	81
Shelby	86.4*	90
Talladega	22.97	81
Tallapoosa	82.5*	77
Wilcox	80*	77
Winston	14.2	91

*Numerical Score

County Food Surveys

Division environmentalists and county environmentalists made 420 joint inspections of intercounty food establishments. There were two hundred intercounty permits issued, eight of which were issued to Automatic Retailers of America for commissaries preparing and delivering 11,000 meals daily in elderly nutrition programs. Assistance and advice were rendered to the Alabama Commission on Aging in the development of sanitary standards for inclusion in contracts for feeding the elderly. Inspections made by division environmentalists by type establishment were as follows:

	Bakeries	Bottled Water Plants	Carb. Beverage Plants	Caterers	Day Care Centers	Feeding Sites	Food Processing	Food Service Establishments	Intercounty	Itinerant	Meat Markets	Mobile Food Vendors	School Lunchrooms	Food Storage	Transport Vehicles	Vending Machines
Number of Inspections	51	7	79	7	5	39	109	1,785	420	60	901	22	495	42	51	28

Food surveys were made of the school lunchrooms for 32 county school systems and w[illegible] city school systems. The average demerit score for the county school systems was 31 and for the city school systems 26.

TABLE 3
COUNTY SYSTEMS

SYSTEM	DEMERIT SCORE	ADMINISTRATIVE SCORE
Autauga	42	84
Bibb	16.75	89
Choctaw	84.6*	78
Cleburne	31.2	75
Coffee	11.2	97
Coosa	23	75
Covington	19.42	97
Dallas	56	75
Etowah	43	51
Fayette	11.6	75
Greene	15	95
Hale	43	77
Jackson	32	57
Lee	25	84
Macon	34	88
Marengo	41	80
Marion	91*	85
Marshall	33	69
Monroe	9	81
Montgomery	26	90
Perry	53	73
Pickens	24	95
Randolph	34	72
Russell	23	77
St. Clair	50.5	78
Shelby	27	83
Sumter	75	36
Tallapoosa	28	81
Walker	19.2	85
Washington	41.6	78
Wilcox	40	84
Winston	10.8	91
Winston	74	82

SYSTEM	DEMERIT SCORE	ADMINISTRATIVE SCORE
Alexander City	17	81
Andalusia	17	94
Arab	29.6	69
Attalla	39	51
Auburn	25	84
Carbon Hill	8	85
Demopolis	49	80
Elba	11.33	97
Enterprise	8.44	97
Florala	20	97
Gadsden	49	51
Guntersville	35	69
Haleyville	16	91
Haleyville	95*	78
Jasper	14.4	85
Linden	37	80
Marion	41	73
Opelika	22	84
Opp	10.6	97
Phenix City	23	77
Roanoke	24	72
Scottsboro	33	57
Selma	45	75
Winfield	92*	85

*Numerical Score

School Food Service Sanitation

Monies made available by the State Department of Education in the amount of $250,000 enabled reimbursement to county health departments for inspections made at the rate of $20 per inspection. During the period October 1978 to September 1979, 12,851 inspections were made of school lunchrooms resulting in reimbursement for 12,500 inspections at $20 each.

Excluding June, July and August, the average monthly inspection percentage was 98.1. A total of 1,284 school lunchrooms were available for inspection under this program.

Summer Food Program

This program, designed to offer a nutritious lunch to underpriviledged children up to 18 years old, is in its second year.

During the months of June, July and August, through a contractural agreement between the Department of Public Health and the Department of Education, preparation and distribution feeding sites are inspected by the county environmentalists. The county health departments are reimbursed $20.00 per inspection for monthly inspections of these sites. This money is made available through a grant to the Department of Education from the United States Department of Agriculture.

There were 1,479 inspections made in the three months: June—560; July—528; and August—391. At $20.00 per inspection, $29,580 was reimbursed to county health departments making inspections under this program.

Milk Sanitation

At the end of 1979 there were 447 producer dairies, 22 pasteurization plants, 1 cottage cheese plant and 4 single service container manufacturing plants located in Alabama.

The number of producer dairies decreased by 25 during the year. The 447 producer dairies market their milk as follows: 220 as members of Associated Milk Producers (AMP), 82 as members of Dairymen, Inc. (DI), 45 as members of Southern Milk Sales, Inc., and 100 are independent producers who market their milk directly to designated milk pasteurization plants.

Personnel of the division made 1,174 inspections of dairy farms, 122 inspections of milk pasteurization plants, 15 inspections of milk distribution stations, 10 inspections of cottage cheese plants, 18 inspections of single service milk container plants and 53 inspections of milk tank trucks.

The milking equipment was tested at nine dairy farms and the milk pasteurization equipment was tested at 14 plants, construction plans for new or remodeled barns or for changed equipment were reviewed for 42 dairy farms.

Mastitis checks were conducted on 1,072 cows representing 27 herds, using the California Mastitis Test Kit. Consultation visits on mastitis problems were provided for 66 dairy farms.

There were 4,771 samples of raw milk collected at the farm. There were 737 of these samples which exceeded the limit for the Wisconsin Mastitis Test; 532 exceeded the Direct Microscopic Somatic Cell County; 438 exceeded standard plate count criteria; 4 were positive for growth inhibitors; and 23 contained added water. Eight hundred and seventy of the samples violated established standards.

There were 246 of some 1,983 commingled raw milk samples which exceeded established standards. Unacceptable bacteria counts were found in 240, four contained added water and three were positive for growth inhibitors.

Results of laboratory examination for 10,461 pasteurized milk and milk production samples collected show that 1,513 or 14.5 percent of these milk samples violated established standards contained in the milk regulations. Coliform standards were violated by 757; 551 violated butterfat standards; two samples were positive for phosphatase; four were positive for growth inhibitors; and three contained added water.

The number of pasteurized milk and milk product samples analyzed and the number of samples that exceeded established criteria are shown in Table 4.

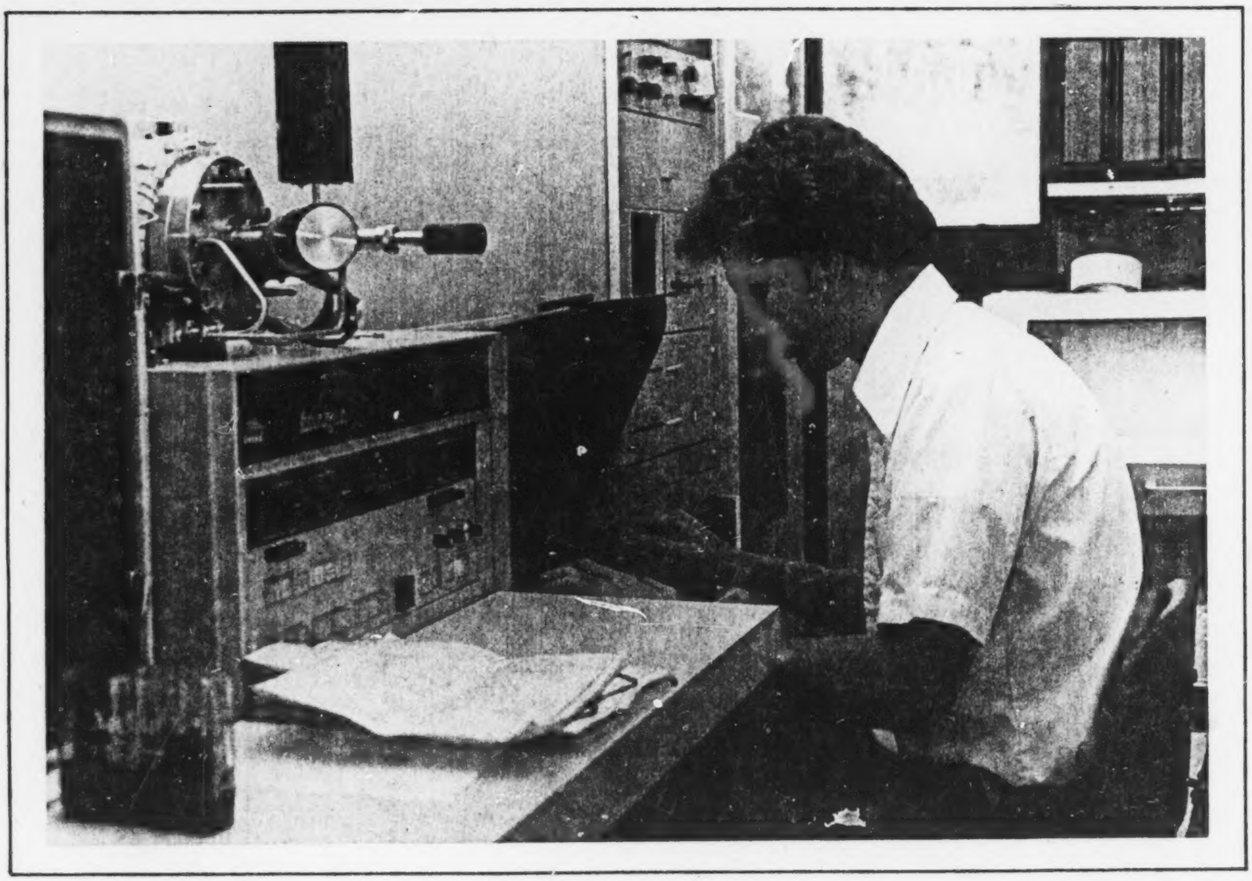


TABLE 4
Number of Pasteurizd Milk and Milk Product Samples Collected in 1979 and Number in Violation of Established Standards

	No. Samples	No. High Coli	No. High Bact.	No. BF Violation	Pos. Phos.	Pos. Growth Inhibit.	Added Water	No. in Violation	% in Violation
Homogenized Milk	2,660	190	159	226	1	1	2	452	16.9
Low Fat Milk	1,169	120	74			1		154	13.1
Skim Milk	1,075	103	63	154			1	257	23.9
Whipping Cream	528	10	25	10				36	6.8
Coffee Cream	4		1					1	25.0
Half & Half	631	15	39	32	1			75	11.8
Buttermilk	1,163	63		1				64	5.5
Sour Cream	498	20						20	4.0
Non Dairy	67	7	6					10	14.9
Flavored Milk	495	47	66	129		1		189	38.1
Flavored Low Fat Milk	1,132	87	110			1		154	13.6
Yogurt	279	2						2	.7
Cottage Cheese	537	73						73	13.5
Dressing or Dip	159	10						10	6.2
Others	64	10	8					16	25.0
TOTAL	10,461	757	551	552	2	4	3	1,513	14.5

Bulk milk hauler training was conducted for 51 milk haulers at 9 locations. The U.S. Food and Drug Administration certified four division environmentalists as "sampling certification officers," and one division environmentalist was certified as a survey rating officer. There were 14 county environmentalists certified as qualified to collect milk and milk product samples. The Food and Drug Administration conducted a three-day workshop on the revised Pasteurized Milk Ordinance for 31 environmentalists at Montgomery. A combined course in pasteurized milk sanitation and frozen dessert sanitation was conducted for 24 environmentalists at Birmingham. A total of four environmentalists completed all requirements for certification as milk inspectors and were presented certificates. The National Conference on Interstate Milk Shipments at Louisville, Kentucky was attended by two division environmentalists; one environmentalist attended Southern Branch, National Association of Departments of Agriculture, Dairy Section Meeting in North Carolina. None of the Alabama milk survey officers attended the Region IV Survey Officer Seminar, but one environmentalist attended an industry milking equipment course at the Surge Milking Equipment Training Center in Illinois.

There were five milk surveys completed, and FDA made 10 check ratings for supplies listed on the Interstate Milk Shippers List. The milk supplies surveyed were as follows:

Milk Supply Rated	Raw	Plant	Past.	Enforcement
Flav-O-Rich Dairy, Fayette	91	93	92	94
Southern Milk Sales, Inc.	95			94
Associated Milk Producers	91			94
Dairymen, Inc.	94			95
Southern Milk Sales, Inc.	95			96

Milk Supply Rated	Producers		Plant		Enforcement	
	Published Rating	Check Rating	Published Rating	Check Rating	Published Rating	Check Rating
Hall Bros. Dairy, Montgomery	91	95	93	92	91	93
Farmbest Foods, Inc., Montgomery	92	—	92	87	92	94
Cloverleaf Dairies, Selma	—	—	91	92	91	95
Black Belt Creamery, Greensboro	92	91	94	95	93	92
Barbers, Birmingham	93	—	97	95	96	94
Baker & Sons Dairy, Birmingham	93	—	93	97	93	94
Flav-O-Rich	91	—	92	80	92	88
Barbers, Anniston	—	—	91	82	91	90
Southern Milk Sales	95	94	—	—	94	94

The milk regulations were amended during the year to change the code dating requirements for processed milk. The eight-day shelf-life and Julian dating provisions were removed and each processor allowed to establish its own shelf-life, provided such date be an open date and such date be recorded with the county and state health departments. Work was begun on the milk regulations revisions to update them in accordance with the revised Federal Pasteurized Milk Ordinance.

Frozen Dessert Sanitation

Division and county environmentalists made 41 joint inspections of the nine frozen dessert mix processors and the nine frozen dessert manufacturing plants in Alabama. In addition to the 18 above plants, frozen dessert permits were issued to nine mix processors and 40 frozen dessert manufacturers which are located out of the state. There are 1,032 retail frozen dessert establishments. These establishments are no longer considered frozen dessert establishments, but are food service establishments regulated by the food regulations adopted May 14, 1979.

A total of 17,387 frozen dessert samples were collected for bacteriological analyses, with results as follows:

Retail Frozen Dessert Establishments—11,970 samples with 8,892 within bacterial standards for a 74.3 percent compliance.

Frozen Dessert Manufacturers—1,842 samples with 1,545 within bacterial standards for a 84.7 percent compliance.

Frozen Dessert Mix Processors—3,575 samples with 3,284 within bacterial standards for a 91.9 percent compliance.

There were instructional courses conducted on the cleaning and operation of retail frozen dessert freezers. A total of 143 county environmentalists and proprietors of retail establishments attended.

Hotel Sanitation

A total of 1,623 inspections were made on the 539 hotels and motels operating in 1979. The 3.01 average inspections per operating establishments are less than the required inspection of 4 per operating establishment, but represent an increase over the 2.44 average inspections achieved in 1978. Operation of 46 establishments was discontinued during the year; 33 closures were due primarily to damages caused by Hurricane Frederick September 12, 1979.

Permits have been issued to 493 hotels and motels for the permit year which began October 1, 1979.

Prison Sanitation

Activities of the year consisted of regular inspections of the state prison, work releases and trustee barracks throughout the state. The seven major prisons were inspected 69 times.

Elmore County	Draper Prison	9 inspections
	Tutwiler Prison	9 inspections
	Staton Prison	9 inspections
	Frank Lee Youth Center	8 inspections
Escambia County	Fountain Prison	12 inspections
	Holman Prison	12 Inspections
Montgomery County	Kilby Correctional Facility	10 inspections

There are fifteen state work release and trustee barracks, and fourteen are inspected by division personnel. The Birmingham work release is inspected by the Jefferson County Health Department. The following inspections were made of each facility:

County	Name	Inspections
Baldwin County	Loxley Work Release	4
Clarke County	Grove Hill Work Release	5
Coffee County	Elba Work Release	7
Coosa County	Alex City Work Release	6
Elmore County	Wetumpka Work Release	4
Escambia County	Atmore Work Release	10
	Atmore Trustee Barracks	10
Hale County	State Cattle Ranch	5
Jefferson County	Birmingham Work Release	—
Marion County	Hamilton Work Release	4
Mobile County	Mobile Work Release	4
Montgomery County	Montgomery Work Release	5
	Red Eagle Honor Farm	6
Talladega County	Childersburg Work Release	5
Wilcox County	Camden Work Release	5
TOTAL		80

Other inspections conducted of food preparation areas were the kitchens located at the chicken farm, pork farm, main farm kitchen, and the dog kennels. Each of these kitchens was inspected and recommendations were made for the upgrading of these areas. The Hotel, a barracks set up beside Fountain Prison for the use of correctional personnel, has its kitchen inspected on a regular basis.

The State Board of Corrections also operates a canning plant. This facility was inspected six times. Plans are being developed for a new building to house this canning operation. New equipment has been ordered.

A total of 33 prison food supervisors have participated in training in sanitary food prepartion, service, storage, safety and pest control. Courses were taught in Kilby Prison in Montgomery County; Staton Prison in Elmore County; and Hotel, located beside Fountain Prison in Escambia County.

Records and reports are now on file for all inspections conducted of state prisons. Records are also being maintained of inspections conducted by county health department environmentalists of county jails.

Records indicate that 224 county jails are being routinely inspected.

Plan Review

A total of 122 sets of plans were reviewed for compliance with regulations, and 95 percent were for new or remodeled school lunchroom facilities. The other plans were for food service facilities, food processing plants and kitchen facilities for national guard armories.

Training

A "Current Concepts in Food Protection" course was presented by the FDA—State Training Branch at Birmingham. There were 52 environmentalists who attended the three and one-half day course.

A four and one-half day workshop was conducted at Troy State University for environmentalists. Topics were on milk, food and lodging sanitation. It was attended by 41 environmentalists.

The 12 hour "Food Manager's Certification Course" was presented at 27 locations. Total attendance was 789; 624 food handlers satisfactorily completed the course and were awarded certificates. The course was offered in 11 new counties.

Division personnel participated in Child Nutrition Workshops presented by the Department of Education for school lunchroom workers throughout the state. There were 16 courses presented to a total attendance of 542. Sanitation, safety and storage were topics taught by division personnel.

Improvements were made in both the course material and examinations. Additional visual aids and films were acquired. It is now possible for three food sanitation courses to be presented consecutively.

There were 10 Troy State University students who received a quarter of field practice coordinated among divisions and county health departments. One week of basic environmental health topic was organized for these students.

A central training file was established to record continuing educational programs attended by all environmentalists participating in training programs for milk, food and lodging sanitation.

Division environmentalists assisted Mobile and Baldwin county health departments in securing a safe supply of food, milk and water in the aftermath of Hurricane Frederick.

Seafood Program

The State Health Officer issued ten orders affecting opening or closing of oyster growing waters in 1979.

Hurricane Frederick struck the Alabama Coast on September 12 and caused closure of all oyster growing waters because of high bacteria counts and the widespread damages to sewage treatment systems around Mobile Bay. This storm destroyed approximately 95 percent of Alabama's oyster reefs.

Actions affecting Alabama oyster growing waters are summarized in Table 5.

TABLE 5

SUMMARY OF ACTIONS AFFECTING ALABAMA OYSTER GROWING WATERS FOR 1979

CLOSED				OPEN			
Date	Area	Remain Closed	Date of Order	Date	Area	Remain Open	Date of Order
2-2-79	I-C, II, II-C, III, III-A, III-B, III-C	I-A, II-A II-B, IV	2-1-79	2-17-79	I-C, II, II-C, III	I, I-E	2-16-79
3-5-79	I-C, II, II-C, III, III-A, III-B, III-C	I-A, II-A II-B, IV	3-2-79	3-31-79	I-C, II, II-C,III	I, I-E	3-30-79
4-25-79	I-C, II, II-C, III, III-A, III-B, III-C	I-A, II-A II-B	4-24-79	5-10-79	II,III	I, I-E	5-9-79
				7-5-79	II-C	I, I-E, II,III	7-5-79
				7-17-79	I-C	I, I-E, II, II-C	7-16-79
9-20-79	All Waters	All	9-19-79	10-26-79	II, II-C, III, I-C, I-E		10-25-79

Some 232 seawater samples were collected for chemical and bacteriological examination from the oyster growing areas. The sampling was concentrated at six sample stations located in the most productive oyster growing areas.

A management plan for the conditionally approved oyster growing water was prepared. This plan outlines the methods and procedures for closing conditionally approved oyster growing areas. The plan also outlines the various indicators that give early warning of possible contamination approaching the various growing areas.

A complete shoreline survey of all oyster growing areas in Alabama was conducted during the year.

There are commercial quantities of oysters in Dauphin Island Bay, a closed area. There is interest by the industry in making these oysters available for harvesting.

Alabama oyster growing waters produced more oysters during 1979 than any time in the past fifteen years, and many of Alabama's oyster shops processed Alabama oysters rather than the Louisiana oysters that had been used in past years.

After the hurricane on September 12, when nearly all Alabama oysters were destroyed, the shops again turned to "out-of-state oysters."

There were 187 shell oyster samples collected from the oyster processing plants. The relative quality of oysters was approximately the same as in past years. A total of 76 oyster samples did not meet fecal coliform standards; seven did not meet plate count standards; and 23 did not meet either standard.

During the period from January-May, 27 permits were issued for oyster shucking operations. There were 12 permits issued for shucking operations during the summer months. Many of the plants were partially damaged, and a few were destroyed by Hurricane Frederick. Permits have been issued to shops as repairs are completed. There were fourteen hold from sale orders placed on 1,034 containers of oysters which violated regulations governing percent liquid, labeling, or quality standards. Eighteen permits were issued for the operations of crab meat picking plants.

Water supplies were sampled three times during the year, one of which was after the September hurricane. Sanitation inspections were made monthly.

DIVISION OF PUBLIC WATER SUPPLIES

The Division of Public Water Supplies under the Environmental Health Administration has the responsibility and the authority for carrying out the provisions of the Alabama Safe Drinking Water Act. Since the passage of federal legislation establishing standards for drinking water systems, the State of Alabama has passed a similar law and has assumed the responsibility of carrying out these federal requirements. A public water supply as defined by state and federal requirements is one which serves 25 people or 15 services for a period of at least sixty (60) days throughout a year. Public water supplies are either a community supply which would serve full time or long term residences, or a noncommunity supply which would serve people on a temporary basis. Examples of a community supply would be any of the municipal systems either water boards or cities with a water supply, trailer parks or correctional institutions. Examples of noncommunity supplies would include but not be limited to industries, schools and restaurants. There are approximately 750 community public water supplies in the state with more than 80 percent being municipal type water systems. Of these municipal type water systems, only approximately 10 percent utilize surface water as a source of their supply, and all of the smaller community supplies such as mobile home parks use ground water sources. More than 20 percent of the community systems purchase water from an adjacent public water supply.

The noncommunity water supplies number approximately 550. Approximately 25 percent of these noncommunity supplies are schools, 15 percent industries, 30 percent motels and restaurants, with the remainder not meeting any specific category. Only five percent of the noncommunity supplies utilize surface water with the remaining 95 percent utilizing ground water as a source.

The staff of the Division of Public Water Supplies in 1979 was made up of six public health engineers, three environmentalists, six stenographers, and two clerk typists. One engineer and one environmentalist were lost to other jobs and replacements were hired. One engineer took educational leave in August, 1979. Three stenographers left employment during the year while two were hired during this year. The projected staff for fiscal year 1979 was for 29 positions. As can be seen, this division is not up to the proposed staff. Funds for this division came from state and federal monies and sufficient funds are available to employ needed staff members. Availability of qualified personnel willing to work for present state salaries, and hiring restrictions and stripping of existing positions through the internal workings of the state government make hiring difficult.

Water System Construction

A downswing in the number of projects, construction dollars, amount of water main installed and number of customers served was noticed in 1979. Those areas presently available for construction of water systems are sparsely populated and thus the cost for constructing these systems is greater. Permits were issued for only seven new water systems in the state in 1979 with five of these systems purchasing water from an adjacent system and two using ground water as a source. This is almost a 50 percent decline from 1978 and more than a 60 percent decline from 1977. Funds for constructing water projects in the state come primarily through loans and grants from the Farmers Home Administration, and a portion of the systems are constructed through HUD Community Development Program. Many of the smaller construction projects this year were financed by the individual system through bond issues. Appalachian Regional Commission money was available as supplementary funds for various projects as were some state revenue sharing funds. The economy has taken its toll in the water construction area. Only 8,344 customers were added by projects approved for construction this year. This is a decline of almost 9,300 customers or 53 percent from last year, and a decline of over 65 percent from 1977. Projects for construction approved by this office totaled almost $44,700,000. Here again is a decline of 37 percent over cost for 1978 projects.The number of miles of pipe for 1979 totaled 1,036 which was considerable less than the more than 2,000 miles for 1977. In projecting the projects in terms of cost per customer, it can be seen that taking total projects and dividing by number of customers we find the cost per customer in 1977 of $2,352, in 1978 of $4,023 and in 1979 $5,357. This does not represent true cost per customer since many of the projects involve extensions or modifications to a system to strengthen the system and provide better service but do not serve any additional customers.

It is projected that the next few years will see slightly more money spent but approximately the same number of new systems and number of customers served with water. The Farmers Home Administration will continue to be the major source of funding for rural systems and extensions. Requests for funding of most new projects and extensions include up to 75 percent grant and this has estblished a back log in funding for FHA through 1983.

Another sign of a downswing in the economy is in the number of subdivisions reviewed by this office. In 1977 more than 1,400 subdivisions were reviewed. In 1978 more than 1,000 were reviewed; however, in 1979 slightly more than 400 subdivisions were reviewed by this office. Of these, 80 percent were approved for interconnecting to existing public supplies.

Inspection and Surveillance

The inspection and surveillance of water works facilities is a major part of the activities of this division. During 1979 all community water supplies were visited and many of these were visited more than once due to recurring problems. All of the schools utilizing their own source of supply and most of the other noncommunities were also visited at least once. During these inspections, the engineer or environmentalist would evaluate the source of supply for the system as to the quality of water and as to whether a sufficient supply was available. Problems with unsatisfactory chemical or bacteriological samples or the failure to monitor for these samples would also be discussed. On all inspections, an effort is made to provide onsite training for new operators and technical advice on problems being experienced by the systems. Almost 500 man days of travel were logged by staff of the Water Division during 1979. While this does not show any increase over travel for the past two years, it is anticipated that additional travel will be required in the future. The present goal of the office is to visit all community supplies at least once each quarter with even more visits to those systems using surface water. It is also felt that all noncommunity systems, especially schools, should be visited at least twice each year. Many of these visits involve only viewing the source of supply and discussing operation with the person in charge. Much more indepth visits or sanitary surveys are needed to truly evaluate the systems and to discover problems before any affected health of the consumer is evident.

Bacteriological Monitoring and Enforcement

State and federal law requires all public water supplies to submit monthly bacteriological samples taken from the area of consumption. The number of samples per system is determined by the number of customers served. The minimum number required is two samples per month during those months that the system is in operation. A few isolated systems operating only a portion of the year do not sample each month. A few systems have established their own health department certified bacteriological laboratories and are capable of doing their own testing.All of the remaining monthly bacteriological samples are analyzed by state health department laboratories. These nine laboratories have provided such a service to the water systems throughout the state for approximately 60 years. During 1979, the branch laboratories located at Huntsville, Anniston, Tuscaloosa, and Selma were closed. It is understood that consideration was also given to closing the branch laboratory at Dothan; however, at the close of the year this laboratory was still in operation. Closing of these laboratories has shifted the load to the other state labs and this increased work load could have a disastrous effect unless excellent quality control is maintained. Due to the restrictions on the handling of the samples, such as getting the samples to the laboratory within 30 hours of collection, the closing of these laboratories created a hardship for many systems. Many of the systems had hand carried their samples, but due to these four branch laboratories closing the distance to hand carry these samples is not practical. Also, the transportation cost has increased and this appears to compound the problem. Most of the initial problems with the closing of these laboratories have been overcome; however, this office is attempting to promote more onsite laboratories, especially for larger systems.

In 1979 more than 558 monitoring violations occured. A monitoring violation occurs when a system fails to submit samples for at least one monthly period throughout the sampling year. The primary reason for this number being so high is mainly due to the addition of 255 noncommunity supplies to the sampling program. Continued letters and calls are required to urge many of these smaller noncommunity systems to comply with the law. Public notification was made in 102 cases, but approximately 2,100 letters were mailed as a result of these monitoring violations.

An unsatisfactory bacteriological sample is one in which more than four coliform organisms per 100 mililiter of sample is found. If a system has more than one unsatisfactory sample or more than 5 percent of its samples are unsatisfactory, a violation occurs. Also, if the total number of bacteriological colonies divided by the total number of samples exceeds a mean of one, a violation occurs. In 1979, 322 bacteriological violations occurred. As a result of these violations, more than 570 letters and numerous phone calls were made. More than 250 systems notified their customers as required by the Safe Drinking Water Act of these unsatisfactory samples. It is anticipated that the number of bad samples will decrease in the next year as more of the noncommunity supplies which are presently not chlorinating instigate this practice.

Due to the large number of small systems who are required only to submit two bacteriological samples each month, it is relatively easy for a system to violate the mean coliform density by having one sample that exceeds nine. Proposed changes in the bacteriological standards could possibly allow for discarding of one bad sample if sufficient check samples were taken in a specified time frame to indicate that a continued problem did not exist. These modifications to the bacteriological standards as of December, 1979 had not been made by EPA.

Chemical Monitoring and Enforcement

Federal and state regulations require 10 inorganic contaminants to be analyzed in drinking water for all community water systems utilizing ground water as a source of supply. These contaminants must be checked on a three year period. In addition, community public water systems utilizing surface water are required to monitor yearly for the ten inorganic chemicals and must also monitor the turbidity of the finished water. Turbidity monitoring is accomplished by the operators at the plant. All chemical sampling for the community systems paying the four percent utility tax is done by this office utilizing the Environmental Health Chemical Laboratories. This laboratory received 4,127 separate chemical samples in 1979 with an estimated 25,000 parameters checked. While a few results indicated questionable quality, follow-up check samples did not indicate any unknown violations of the chemical standards for community water systems. Five systems exceeded the acceptable level for fluoride which is naturally present in their water. Monitoring requirements for chemical analysis for the 10 inorganic chemicals were violated in 22 community water suppliers and therefore a total of 220 chemical violations are noted. Two of these 22 systems made public notification due to lack of sampling. Only one community water system utilizing surface water experienced continued problems in violating the turbidity level. This system violated the turbidity standards for all twelve months; therefore twelve turbidity violations were recorded. Proper notification was made to the customers of this system and a satisfactory source of supply will soon be available from a neighboring system.

Noncommunity supplies must have a nitrate analysis performed on the water; if the noncommunity supply utilizes surface water, the turbidity must be checked on a daily basis. At present this office is collecting all samples for nitrate analysis and utilizing the Environmental Health Chemical Laboratory. The industries utilizing surface water are being notified of the turbidity sampling requirements and being requested to submit this data on a monthly basis. No noncommunity systems had chemical violations in 1979.

During 1979 five additional laboratories were certified for performing the various chemical contaminants which brings the number of certified laboratories to 26 for Alabama.

Model State Information System Status

During the year the Model State Information System (MSIS) underwent a complete revision of the Public Water File which is the inventory subsystem. This revision included a complete updating of information regarding each public water supply in the state. The subsystem was utilized during the year for various reports (including part of the federal report) regarding different type water supplies in the state, mailing labels, etc. In addition, all required monitoring sample results are now being recorded in the computer as well as manually in preparation for the running of compliance with MSIS. Information has been compiled and readied for implementation of the operator subsystem. The use of this subsystem will allow for checking for certified operators (as required by state law) for each public water supply. This is currently done manually.

In addition during 1979 two Cathode Ray Tube units were purchased for use by this division and Data Processing. The implementation of these units will allow for daily checking of the inventory for correct information regarding each system without having to refer to memory or go through manual records. In the future these units will allow for updating of the Public Water File and Periodic Sample File. This will be a manpower savings as well as allowing for more immediate updating of the computer files. However, even with the use of the CRT units, it will still be necessary to utilize additional personnel in Data Processing as well as this division to run monthly compliance and utilize this program for the purpose for which it was designed. Currently MSIS is updated on a parttime basis in this division and on a time availability basis in Data Processing.

Training and Certification

This office has continued to support and actively participate in the activities of the Alabama Water and Pollution

Control Association and the American Water Works Association. Through these two organizations and the recently established Rural Water Association, numerous operators can be contacted to discuss their problems. Opportunities are also presented to discuss regulations of the health department and to help educate water works operators and managers. This office again played a very active role in the Short Course School sponsored by AWPCA which was held August 13-15, 1979, at the University of Alabama in Tuscaloosa. This office provided the technical program; various staff members were on committees with the Association. The American Water Works Association held its annual meeting in Jackson, Mississippi and since out of state travel was required, staff attendance was denied by the Governor's Office. The Rural Water Association has held numerous workshops throughout the state and one central meeting during 1979. Representatives of the Division of the Public Water Supplies have attended almost all of these meetings either in the role of program participants or contacting those water officials present at the meeting.

Mr. Bob Fowler, who has been involved in training of water works operators for the past twelve years, changed jobs. A very large gap in the training program for higher grade water works operators has been created by the loss of this instructor. At present no replacement instructor has been obtained. There are nine parttime instructors: Earnie Truelove in Demopolis, Donald Francis in Dothan, Charles Carroll in Gulf Shores, Tony Owens in Huntsville, Johnny Mitchell in Satsuma, George Bryant in Montgomery, Lynn Campbell in Muscle Shoals, Wayne Kearley in Talladega, and David Lawson in Tuscaloosa are still available teaching Grade I & II classes two sessions each year. These instructors have been instrumental in the continued education and the certification of many water works operators. The March exam saw 139 operators take water exams with a passing rate of 65 percent. The August exam showed 116 taking the water exam with 57 percent passing. A comparison was made between the operators taking the available classes and their passing rate as compared to those not attending classes and their passage rate. Almost a 3 to 1 ratio could be seen in a passage rate for operators who attended classes.

Classes were held at the request of the Environmental Health Administration Director W. T. Willis in an effort to provide training in the field of water supply for various environmental students and new environmental employees. An ongoing training program appears to be forthcoming on at least an annual basis for new health department employees and possibly other students interested or involved in environmental affairs.

State Environmental Protection Agency Activities

As required by the provisions of the Safe Drinking Water Act, the Division of Public Water Supplies has a very close working relationship with the water supply personnel in Region IV, EPA in Atlanta, Georgia. Quarterly reports of monitoring and MCL violations are required along with revised budgets and other information as requested. An annual report was hand carried to EPA at the end of the fiscal year 1979 providing a summary of items reviewed and action taken. Along with this summary was a list of all violations which occurred in Alabama during the fiscal year.

Proposed modifications to the Interim Primary Drinking Water Standards have been discussed on several occasions as has the proposed trihalomethane and synthetic organic standards. A liason group with representatives from all the region has been established, and Mr. Joseph E. Downey was selected as representative for all states in this region. This liason group has promoted excellent discussion and exchange of ideas from various programs throughout the United States. With the proposed trihalomethane and synthetic organic standards, which could affect many of our systems and require expenditures in millions of dollars, it is vital that this office continue to be able to provide satisfactory input to EPA. The present restriction on out-of-state travel can seriously impair this division in doing its job and also affect the entire state. It is vital that staff members attend seminars and other related meetings to keep abreast of current studies of proposed standards. It is also vital that the State of Alabama through the Division of Public Water Supplies continue to have an influence on proposed standards and implementation of existing standards.

Alabama Water Well Standards Board

The Alabama Water Well Standards Board technical staff operates out of the Division of Public Water Supplies. This technical staff consists of two environmentalists. By law the requirements of this regulating board is to establish standards for construction of water wells, licensed water well drillers, and address complaints regarding the construction of water wells in the State of Alabama.

Out of 182 applications for well drillers licenses processed, 156 of these applications come from Alabama, 8 from Georgia, 5 from Florida, 9 from Mississippi, and 4 from Tennessee.

Intent to Drill forms are available for a well driller, and a notice must be made to the county health department prior to a well being constructed. According to the Intent to Drill cards received, there were almost 2,300 wells constructed in 1979. Of the 182 licensed well drillers, Alms Pump Service Company constructed over 190 water wells to become the most active driller.

The staff of the Water Well Standards Board inspected 462 wells within the state. Less than one percent of these wells were disapproved. The main reason for disapproval related to the casing not being of sufficient height above ground level, presence of no sanitary seal, or two inch wells not being grouted. There were 10 wells disapproved due to the presence of an unfilled annular space.

Approximately 9 complaints were filed with the Alabama

Water Well Standards Board from property owners within the state. The majority of the complaints centered on foreign matters such as sand, mud or iron bacteria in the water. Unsatisfactory production or low well capacity accounted for the additional complaints. Of the nine complaints, five were resolved through mediation by members of the staff, two were resolved without mediation, and two were brought before the board. The two complaints presented before the board were concluded as being contractual disagreements and therefore dismissed without any action.

Summary

The Division of Public Water Supplies has been able to maintain field contact with most of the community and noncommunity systems throughout the state. As more and more problems become evident, increased contact in the field will be required; thus an increased staff will be necessary. Fuller implementation of the Safe Drinking Water Act in the realm of noncommunities has been realized throughout 1979. Many more of the noncommunity systems have been located and incorporated into the enforcement process. Regulations for these noncommunities have not been finished as yet. Violations reported to EPA centered around high natural fluoride levels in existing systems, violations for failure to monitor either the chemical or the bacteriological quality of the water, or unsatisfactory bacteriological quality of water. Continued efforts must be made to work with systems experiencing bacteriological problems. Due to increased administrative requirements, additional work in laboratory certification and training requirements, and the expansion of the data management section a great deal more office work is required in the program. Public participation is a requirement also of the Safe Drinking Water Act and this portion of the program is in its infancy.

No water borne outbreaks of disease were recorded in the state of Alabama in 1979. No cases of poisoning or related problems due to high levels of trace chemical substances in water was reported. This continued good record is attributed to a strong program in past years, a good quality of raw water available in most parts of the state and the continued training and promotion of proper water treatment by this office. To properly accomplish what is necessary in the future will require additional staff. While sufficient federal funds are available for this required employment, internal problems within the state structure and lack of properly trained individuals willing to work for state salaries continue to hamper progress along these lines.

DIVISION OF RADIOLOGICAL HEALTH

Pursuant to Title 22, Chapter 14, the division regulates all sources of ionizing radiation except reactors. In addition, the division maintains in coordination with other state agencies an emergency response capability unique for ionizing radiation.

Radioactive Materials

As of December 31, 1979, the division had 378 active specific licenses to use radioactive materials. Table 1 lists the licenses by type. During 1979, 324 amendments were issued to these licenses; new licenses were also issued. One of the major manufacturers went out of business.

The division conducted inspections of 126 of these licenses in 1979. 46% of the licenses were in compliance. We reported four incidents involving radioactive materials to the U.S. Nuclear Regulatory Commission.

X-ray Equipment

Table 3 gives the total inventory of x-ray equipment in Alabama, excluding Jefferson County, which conducts its own x-ray program. Table 4 gives the x-ray inspection data for the same units. A total of 23% of the facilities and 5% of the machines were in non-compliance.

Environmental Monitoring and Nuclear Power

In 1979, the Division began to investigate a possible problem involving phosphate slag sold by TVA to concrete block manufacturers. No data were available to assess the potential impact. Early information indicated that 1,750,000 tons of the slag had been sold in Alabama since 1953; 56 concrete block companies had received the slag and distribution was all over the state with most of the material used around Muscle Shoals, Athens, Cullman, Tuscaloosa and Birmingham. The initial investigation was inconclusive in defining the hazards, if any, that exist. Equipment was ordered to permit the further investigation of this potential and in 1980 we anticipate a major effort. At least one civil suit has already been filed on this matter.

TABLE I
Alabama Radioactive Material Licenses by Type

Medical	Academic	Industrial	Civil Defense	State	Other	Total
115	30	190	1	11	31	378

TABLE II
Radioactive Material License Inspections by Type

Medical	Academic	Industrial	Civil Defense	State	Other	Total
56	11	43	0	0	16	126

TABLE III
X-Ray Tubes Registered by Facility Type

Dental	Physicians and Clinics	Hospitals	Chiropractors	Veterinarians	Podiatrist	Total
1,401	710	947	148	91	6	3,303

TABLE IV
X-Ray Machine Inspections by Facility Type*

Dental	Physicians and Clinics	Hospitals	Chiropractors	Veterinarians	Podiatrist	Industrial
454	188	116	45	21	3	2

*Exclude Jefferson County

DIVISION OF SOLID WASTE AND VECTOR CONTROL

The Division of Solid Waste and Vector Control functions in three major program areas: Solid Waste Management, Hazardous Waste Management and Vector Control. The activities implemented for these specific areas during 1979 are described below:

Solid Waste Management

The division is pleased to report that the status of solid waste management in Alabama as of December 31, 1979, was good. Collection availability was evaluated as adequate for 99% of the state's population, and disposal was considered adequate for 95% of the state's population. "Adequate" disposal, however, will in many cases not meet the strict criteria as prescribed in the federal "Criteria for Solid Waste Disposal Facilities and Practices" as published in the Federal Register, September 13, 1979.

A summary of the formal evaluations of landfill operations and site status is listed below:

Total of sites under surveillance	134
Total evaluations made during 1979	517
Total evaluations indicating satisfactory operations	451
Total evaluations indicating substandard operations	66

The above information indicates an average of less than four formal evaluations per site per year. While this is an increase over the 1978 frequency, it is still less than desirable. Limited staff has precluded more frequent inspections. At the close of 1979, the division employed 18 persons, three of which were clerical. Due to work areas other than Solid Waste Management, the division was able to field only four persons in sanitary landfill evaluations. Obviously, more frequent evaluations would result in the earlier detection and correction of substandard conditions. To improve the compliance, the Division offers technical assistance in the form of landfill operator training. During 1979, this training program provided assistance to 22 landfill operators. A majority of this effort was provided during clean-up operations following Hurricane Frederick in Southwest Alabama. For approximately four months the division was without the services of a vocational instructor.

Hazardous Waste Management

During 1979, the division continued its development of the hazardous waste management program pursuant to Act 129, the Alabama Hazardous Waste Management Act of 1978. The Technical Advisory Committee appointed under the law provided valuable assistance in the drafting of bylaws and rules and regulations. State funding for the implementation of this law did not materialize during 1979, but progress was made in program development due to federal funding.

Monitoring and surveillance of the secure chemical waste disposal facility operated by Chemical Waste Management, Inc., continued during 1979. Data gathered indicates that the facility has operated without a violation of its existing permit. During 1979 the site received and properly managed the approximate quantities of hazardous wastes listed below:

50,000,000 Pounds
130,000 Drums
456,000 Gallons
172,000 Cubic Feet

Industries were contacted during the year to advise them of the pending regulatory program. During these visits, technical assistance was provided in all areas of hazardous and non-hazardous waste management.

Since the State Hazardous Waste Management Rules and Regulations were not promulgated before the end of the year an active regulatory program could not be implemented. The division anticipates the promulgation of the rules and regulations during 1980 and an increased involvement with industries. To meet this demand it will be necessary to employ more field staff. The division is hopeful that its efforts will be supported by the administration in areas of funding and employment.

Vector Control

The division's Vector Control Program continues as an understaffed and underfunded activity.

Limited advice and assistance were given to cities, counties and individuals on problems relating to mosquitoes, flies, rats, bats and bird roosts. Some limited trapping for mosquitoes was accomplished, as well as vector related problems resulting from Southwest Alabama's hurricane damage.

It was fortunate that there was little activity state-wide from mosquito-borne encephalitis during the past year. However, there is every indication that an epidemic of Dengue fever moving northward through Mexico will reach the United States by spring of 1980. The vector for Dengue fever *(Aedes agypti)* is prevalent throughout urban and rural South Alabama and can be readily found in certain areas of North Alabama. We were represented at an endemic regional meeting on the Dengue fever problem at CDC in Atlanta on January 9-10, 1980.

ALABAMA AIR POLLUTION CONTROL COMMISSION

Alabama completed the complex task of revising the state implementation plan (SIP) during 1979 as mandated by the Clean Air Act Amendments of 1977.

The process involved developing a control strategy designed to bring all areas of the state (nonattainment) into compliance with National Ambient Air Quality Standards (NAAQS) for the pollutants for which violations had been monitored; namely, particulates, sulfur oxides, and oxidants/ozone. Each nonattainment area was carefully scrutinized to determine factors contributing to current elevated levels, projected 1982 levels, and effective control techniques for achieving the required reductions.

SIP Approved

Alabama's revised SIP was approved by the Environmental Protection Agency (EPA) on November 26, making the state one of less than a dozen throughout the nation to have had plan revisions accepted by the federal agency.

Approval was conditional on several minor changes being made in the permitting procedures for new or expanded sources planning to locate in a nonattainment area or with the potential to significantly impact such an area.

Sulfur Dioxide and Ozone Control Strategy

The control strategies for achieving the NAAQS for sulfur dioxide (SO_2) and ozone were finalized during 1979, with the particulate control plan having been completed the previous year.

The two nonattainment areas for SO_2 are Jackson County for violation of the primary or health-related standard and Colbert County for monitoring violations of the secondary or welfare-related standard.

Studies determined that elevated levels were directly attributable to emissions from two Tennessee Valley Authority steam plants; namely, Widows Creek Plant in Jackson County and the Colbert County Steam Plant.

A compliance schedule for achievement of the SO_2 standard at the Widows Creek Plant by September of 1981 was contained in a consent decree filed with the federal district court in Birmingham. Installation of wet scrubbers on two boilers and the burning of low-sulfur coal in the remaining six units is expected to result in achievement of the NAAQS for SO_2 by the December 1982 deadline required by the Clean Air Act Amendments of 1977.

A compliance schedule negotiated for the Colbert County facility reflected an April 1, 1983, deadline. Although the facility was in compliance with applicable state air pollution control rules, violations of the secondary standard were being monitored. The steam plant proposed to route emissions from four stacks to a single unit to be constructed according to standards defined by EPA as representing "good engineering practices." This procedure should reduce ground-level concentrations being monitored.

The control strategy for meeting the federally established standards for ozone in the five counties designated nonattainment for this pollutant (Jefferson, Madison, Mobile, Morgan, and Russell Co.—Columbus, Ga. interstate area) consisted of documentation that attrition of older, poorly controlled automobiles would result in achievement of the standard by the 1982 statutory deadline.

Nonattainment Designations

During 1979 two geographic areas of the state which had been designated nonattainment during the initial classification process in 1977 were reclassified to attainment status. Reclassification was a result of ambient air quality data from the past two years which certified the absence of violations of the NAAQS. Both of these were nonattainment for the secondary standard for particulates: Mobile County (area in the immediate vicinity of the Alabama Power Company's Barry Steam Plant) and Colbert County (area in the immediate vicinity of the Tennessee Valley Authority's Colbert County Steam Plant).

On May 3, the U.S. Fifth Circuit Court of Appeals invalidated the particulate nonattainment designations for portions of Jefferson County (metropolitan Birmingham and the City of Leeds) and Etowah County (area in the vicinity of Republic Steel in Gadsden) on the basis that EPA had committed a procedural error and was in violation of the federal Administrative Procedure Act in the original designation process. The action was as a result of a suit filed against EPA by U.S. Steel and Republic Steel.

The court ordered EPA to reconsider the designations, making certain to provide adequate opportunity for public comment on the proposals.

As a result of the court action, the AAPCC on June 5 suspended indefinitely implementation of regulations adopted previously for additional control of particulates in the nonattainment portions of these two counties.

EPA held the required public comment period in August but by the end of 1979 had failed to take final action regarding the redesignations.

Ambient Air Quality

The ambient air quality monitoring network is composed of 81 high-volume samplers which monitor for particulates. Additional monitoring sites and pollutants measured include the following: ten, sulfur dioxide; four, carbon monoxide; five, ozone; and seven, nitrogen dioxide.

During 1979, only nine sites violated the annual geometric mean for total suspended particulates (TSP) as opposed to 14 sites the previous year. Eight of these were located in Jefferson County and one was a Mobile County site. At all stations monitoring violations of the annual geometric mean for TSP, ambient levels for 1979 reflected an improvement over 1978 levels (see 1979 Site Violations Chart).

During the third quarter of 1979, Jefferson County air quality showed a marked improved trend which was primarily attributable to summer showers and turbulent weather. Decreases were recorded at all but three of the 15 stations comprising the Jefferson County Department of Health's air monitoring network (see Jefferson County—Particulate Concentrations—July-September 1979 Chart).

Of the 81 sites monitoring for TSP during 1979, eight recorded annual geometric mean levels which were equivalent to those measured in 1978, 60 sites measured levels lower than those recorded the previous year, and 13 stations recorded increased levels. Of the 60 sites measuring reduced levels, 28 stations recorded decreases of five or more micrograms per cubic meter (ug/m^3) and 13 reported decreases of ten or more micrograms (see Particulate Sampling Sites—1979 Annual Geometric Means Chart).

Improvements were also noted in the number of sites and the number of exceedances of the 24-hour standard for TSP, as indicated by the chart below:

VIOLATIONS—TSP (24-hour concentrations)
Maximum 24-hour concentration
(not to be exceeded more than once a year)
Primary Standard-260 ug/m^3
Secondary Standard-150 ug/m^3

	Primary		Secondary	
	1978	1979	1978	1979
No. of Sites Recording Violations	4	4	21	15
No. of Times Violation Occurred	48	18	464	206

During 1979 no violations of the NAAQS were recorded for sulfur dioxide, ozone, and nitrogen dioxide. One site—the Fairfield station in Jefferson County—recorded violations of the eight hour standard for carbon monoxide.

During the year, the technical staff continued to refine a quality assurance program for ambient data. The objectives of the program are to standardize methods of collecting, analyzing, and reporting ambient data and to assure the precision and accuracy of such information.

In addition to on-going monitoring activities, special sampling was also conducted in the following areas: Troy—to insure that ambient standards for lead were being met; Jasper—to better determine TSP levels in an area which in the past has recorded elevated levels; and Bankhead National Forest—study to determine background levels of TSP, SO$_2$ and Ozone.

Stationary Source Regulation

Regulation of industries or stationary sources of air pollution is primarily divided into two areas: surveillance of existing air pollution sources to ensure continued compliance with applicable standards; and review of proposed new sources to determine applicability of state and federal regulations and proposed impact of expanded industrial activity on existing air quality.

Existing Sources

Two mechanisms are employed in the enforcement of standards at existing industries; namely, engineering inspections and field surveillance.

During 1979, the technical staff conducted 1,233 on-site detailed engineering inspections of industrial facilities in every county of the state with the exception of those plants regulated by the four local programs. Inspections for the year represented a 20 percent increase over those conducted during 1978.

The field patrol maintained a surveillance over 214 permitted sources, conducting approximately 3,000 inspections. In 1,730 inspections facilities were found to be operating with no observable problems. During 419 inspections industrial sources were found to have air pollution problems requiring corrective action. In over 800 instances no determination could be made because sources were not in operation.

New Source Review

Interpreting ever-changing and increasing federal regulations and determining their applicability to new source construction continues to be a very time consuming and complex task.

For example, EPA's regulations for Prevention of Significant Deterioration (PSD) were first proposed in 1975. These guidelines are intended to protect air quality in "clean air" areas or those monitoring ambient levels better than the federally-established NAAQS. In general, they establish ceilings on the amount of increased air pollution which will be permitted and impose stringent preconstruction review guidelines for additional industrial activity in these areas.

PSD regulations are currently undergoing their third revision as a result of a U.S. Court of Appeals for the District of Columbia Circuit Court decision which declared key provisions of the regulations to be invalid. Although EPA did not finalize revised regulations during 1979, states were being required to administer a PSD program.

During 1979, 216 permits to construct were issued representing utilization of new source review procedures. Permits issued represented an increase of 44 percent over those processed the previous year.

AAPCC Appointments

During 1979, Governor Fob James appointed three members to the commission. These included Dr. C. Paul Graham, Jr., Birmingham physician; Roy S. Stevens, executive vice president of the University of North Alabama in Florence; and J. Ernest Farnell, president of an engineering consulting and design firm in Mobile.

Regulatory Revisions

Two public hearings were held during the year and the following regulatory revisions subsequently adopted by the commission:

Volatile Organic Compound Emission Standards: Emission-limiting regulations were adopted for the control of hydrocarbon emissions from 11 major (potential to emit 100 tons or more of a regulated pollutant in a year) source categories. These included such facilities as bulk petroleum liquid storage plants, surface coating facilities, can and fabric coating operations, and metal cleaning and degreasing operations.

Offset: These regulations provide a mechanism for allowing industrial growth in nonattainment areas. In general, they require that a reduction be achieved at an existing source in the area which will more than offset the increased emissions resulting from new industrial activity.

Visible Emissions: Existing regulations required that industries comply with mass emission regulations, calculated on the basis of amount of material processed, and opacity regulations which are based on optical density. The revisions provided for adjustments to the opacity limits for sources which could validate by an approved testing method that mass emission rates were being met while opacity limits were exceeded.

Nitric Acid Plants: The change in regulations governing emissions from nitric acid plants allowed facilities with a designed capacity greater than 150 tons per day of 100 percent acid to increase allowable emissions from 5.5 pounds per ton (lbs/T) of 100 percent acid produced to 20 lbs/T. Since the change was limited to a specified production rate only two plants in the state were affected: U.S.S. Agri-Chemicals in Cherokee and the Tennessee Valley Authority's National Fertilizer Development Center in Muscle Shoals.

Legal Actions

During 1979, a settlement was entered by the United States District Court for the Northern District of Alabama ending almost two and one-half years of litigation against the Tennessee Valley Authority (TVA). TVA had agreed on December 14, 1978, to a $400 million air pollution clean-up project—the largest air pollution settlement ever—in order to bring 10 of its coal-fired electric plants in three states into compliance with the Clean Air Act.

Intervention into similar litigation filed against TVA in the Sixth Judicial Circuit in Kentucky and Tennessee had delayed entry of the settlement. However, on October 15, 1979, the Alabama court officially entered the Consent Decree negotiated for the litigation, thereby placing TVA on a court-approved schedule of compliance.

Five additional cases were filed against sources of air contaminants in 1979. Republic Steel Corporation was found by the commission to be in violation of air pollution control rules and regulations, and litigation was subsequently filed against its Basic Oxygen Process Furnace Complex Shop and Coke Battery No. 2 in Gadsden. In another action against a steel-related industry, the commission filed suit against Empire Coke Company for violations of pushing regulations at Coke Battery No. 1 in Tuscaloosa.

Litigation was also initiated against Frit, Inc., of Ozark for violation of fugitive dust regulations. A settlement was entered in the case, and Frit is presently on a court-approved schedule of compliance.

In an action worthy of mention, suit was filed against a privately owned muffler shop in Opelika for tampering with automobile emissions control devices. This was the first instance of prosecution in Alabama on this type of violation of state and federal law. That case is presently pending in state court.

Complaint Services

Complaints received directly from individual citizens and by referral from government agencies and officials declined during 1979, a trend which has held since 1974. Complaints peaked during 1974 with 276 received. The 187 complaints recorded in 1979 represent a 32 percent decrease. This decline is felt to be directly attributable to the increasing rate of compliance by stationary sources during this period and to initiation of better surveillance methods, such as the field patrol.

Staff initiated investigations, which primarily involved open burning violations for nonpermitted sources, peaked in 1977 with 202 being recorded. A 75 percent decrease (53 complaints) was reported during 1979. This reduction is thought to reflect increased public awareness of open burning regulations and effectiveness of enforcement procedures.

Stack Tests

A special stack testing team observed 76 industrial stack tests and conducted an additional four tests to determine compliance of stationary sources with emission-limiting requirements.

Public Information Services

During 1979, approximately 250 public inquiries were received by letter or telephone. More than 3,000 pieces of material, including brochures and special reports, were mailed in response to requests concerning a variety of aspects of the air pollution control program and related environmental matters. Approximately 1,000 news releases were disseminated to major news outlets throughout the state related to AAPCC activities.

PARTICULATE SAMPLING SITES
1979-Annual Geometric Means
Standards: primary - 75 ug/m³
secondary guideline - ug/m³
(0 no change; + increase; - decrease)

Station	1979 Mean	Change From 1978 Mean
Alexander City	38	0
Andalusia	42	-5
Anniston		
Blue Mt. Post Office	46	-4
Calhoun Co. Health Dept.	72	+7
Brewton	44	+1
Calera	54	-6
Childersburg	51	-6
Clanton	42	-9
Demopolis	48	-10
Dothan	59	+2
Eufaula	50	+2
Evergreen	32	-1
Flatrock	38	-3
Florence		
Bd. of Education Bldg.	51	0
Florence Hospital	47	-2
Fort Payne	50	-8
Gadsden		
NASN site	51	-6
South Gadsden	54	-11
Walnut Park Fire Station	69	-8
Walnut Park School	75	-4
Guntersville	51	+4
Huntsville		
Airport	48	-9
Downtown	51	-5
Ed White School, Sparkman Dr.	45	-5
Jetport Weather Station	36	-3
Mad. Co. Health Dept.	*	
No. Mem. Parkway Fire Station	42	-3
Pulaski Pike Fire Station (NW)	47	-7
So. Memorial Parkway Fire Station	44	-6
UAH Campus	*	
Vocational School, Drake Ave.	48	-12
Jasper		
Jasper Elementary School	52	-6
Jasper High School	53	-8
Walker Co. Health Dept.	72	-6
Jefferson County		
Bessamer	90	-7
Downtown	79	-13
East Thomas	76	+6
Ensley	78	-1
Fairfield	67	-11
Hueytown	53	-9
Huffman	60	-4
Leeds	111	-17
Mt. Brook	44	-7
No. Birmingham	101	-29
Tarrant	113	-17
UAB	70	-12
West End	74	-2
Woodlawn	75	-6
Mobile County		
Axis	*	
Big Sniffer	41	+3
Brookley Field Cafeteria	43	-5
Chickasaw	61	+1
Health Dept.	50	-10
Laurendine Rd.	27	-3
Myric Fire Station	61	-6
Salco	48	-7
WKRG	77	-10
Montgomery		
AAPCC Offices	51	0
Boylston	48	+6
Newtown Community Center	44	-6
Muscle Shoals	46	-1
Oneonta	48	-4
Opelika	38	-2
Pennington	33	-4
Phenix City	57	-1
Robertsdale	39	-6
Russellville	52	0
Scottsboro	51	+3
Selma	47	+3
Talladega	69	0
Tri-Co. Health District (Lawrence,Limestone, Morgan, Cullman,Counties)		
Athens		
Athens College	54	+1
Limestone Co. Health Dept.	54	-2
Cullman	55	-5
Decatur		
Fire Station No. 2	55	0
Kimberly Trailer Court	53	-5
Morgan Co. Health Dept.	61	-5
Morgan Co. High School	44	-10
Hartselle	39	0
Limestone Co. (Between Athens and Decatur	43	-2
Moulton	40	0
Troy	45	+4
Tuscaloosa		
Boteler Jr. High School	39	-10
Bryce Hospital	49	-1

*Site discontinued or insufficient number of samples collected

1979 SITE VIOLATIONS
Annual Geometric Means—Total Suspended Particulates
Primary Standard-75 ug/m³ Secondary Guideline 60 ug/m³

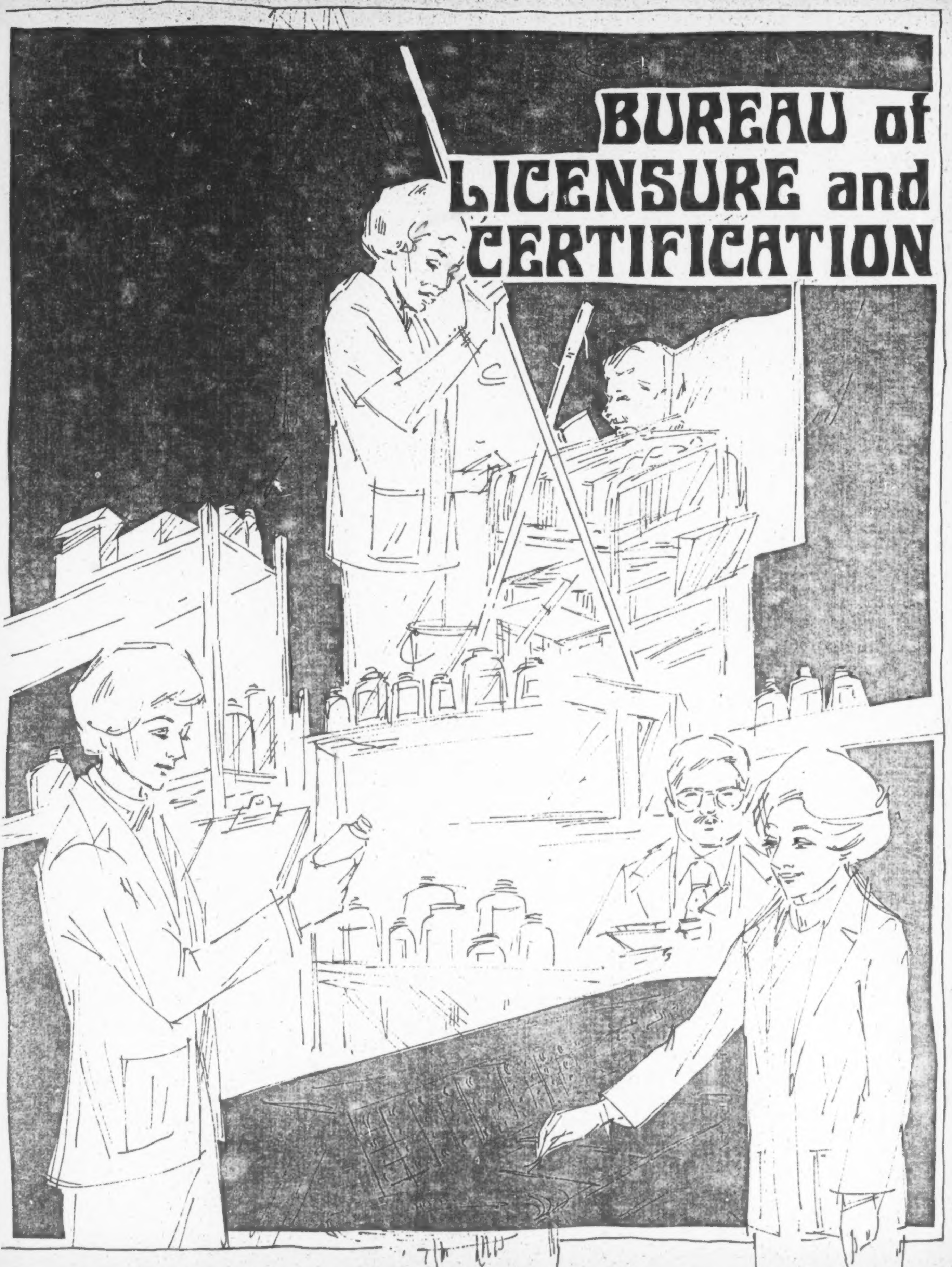
STATION (sites exceeding annual TSP standards in 1979)	1960's	1972/1973*	1978	1979
Bessemer-(Jeff. Co.)	175	126	97	90***
Downtown B'ham (Jeff. Co.)	**	142	92	79
East Thomas (Jeff. Co.)	**	**	70	76
Ensley (Jeff. Co.)	**	**	79	78
Inglenook (Jeff. Co.)	**	**	**	90
Leeds (Jeff. Co.)	**	138*	128	111
No. B'ham (Jeff. Co.)	318	179	130	90***
Tarrant (Jeff. Co.)	236	141	130	113
WKRG (Mobile Co.)	**	144	87	77

*If 1972 data not available, 1973 data used
**Site not established
***Less than one-year's data available

JEFFERSON COUNTY
PARTICULATE CONCENTRATIONS
July-September, 1979
Particulate Primary Standard
Mean-75 ug/m³; 24-hr.-260 ug/m³

Station	Mean Level	Change From Last Quarter	Highest 24-Hour Sample	Second Highest
Downtown	81	-1	200	193
No. B'ham.	107	+13	373	267
Fairfield	66	-2	129	125
Leeds	110	-4	229	220
Bessemer	90	-5	188	156
East Thomas	81	-2	163	150
Tarrant	114	+5	275	233
West End	79	-8	146	120
Woodlawn	75	-5	151	113
Mtn. Brook	45	-4	98	73
Southside	75	-6	140	138
Huffman	81	+20	153	85
Ensley	77	-5	190	114
Hueytown	47	-17	84	83
Inglenook	59	-39	168	78

BUREAU of LICENSURE and CERTIFICATION



Respective agreements with the Secretary of the Department of Health, Education, and Welfare and the Medical Services Administration, State of Alabama, continue in effect and provide the basis for certification of health care facilities desiring to participate in Medicare/Medicaid programs.

State statute provides the basis for licensure activities in Alabama. Several amendments to the statute have expanded its scope since passage in 1949. During the 1979 legislative session its definition was further expanded to include end stage renal disease facilities, rehabilitation centers, abortion or reproductive clinics, and outpatient ambulatory surgical care facilities.

Organizationally, the technical staff for the new Plans and Construction Division were relocated to the bureau to provide capability to ensure safe, functional and efficient construction and modernization of health care facilities.

Division of Certification

Determining eligibility of health facilities and agencies and recommending certification to the appropriate government agencies to participate in the Medicare and Medicaid programs is the responsibility of the Bureau of Licensure and Certification. The Medicare certification program is conducted in accordance with an agreement with the Secretary of the Department of Health, Education, and Welfare and the Medicaid certification program operates under a similar agreement with the Commissioner of the Medical Services Administration. Both the Medicare certification programs are administered at the state level by the Certification Division.

During 1979 the certification activity of Medicare and Medicaid health care providers and suppliers remained fairly constant compared to 1978. Toward the end of the year, however, efforts were being directed toward requiring all skilled nursing homes to provide intermediate care, as well as skilled care. On November 1, 1979, home health agencies were required to obtain a Certificate of Need approval before certification in the Medicare program could be effected.

Generally health facilities and agencies participating in one program also participate in the other. There are some exceptions; for example, intermediate care facilities can participate in Medicaid only. Others can elect to participate in the Medicaid program. Each facility is surveyed at least annually to determine eligibility for recertification. In addition to the annual survey, bureau personnel—nurses, pharmacists, dietitians—visit facilities and agencies periodically to follow up on identified deficiencies and to provide assistance in complying with Medicare/Medicaid regulations.

Following is the number of facilities and agencies participating in the Medicare and/or Medicaid programs as of December 31, 1979:

	Medicare	Medicaid
Hospitals	137	135
Skilled Nursing Facilities	182	184
Intermediate Care Facilities (ICF)		20
Intermediate Care Facilities for Mentally Retarded (ICF/MR)		3
Distinct Part ICF's of Skilled Nursing Homes		135
Home Health Agencies	87	80
Independent Laboratories	39	39
Rural Health Clinics	11	8
Renal Dialysis Facilities	16	8
Rehabilitation Centers	7	

Compliance Division

Region IV Office for Civil Rights statistics for 1979 reflect that hospitals, nursing homes, and related health facilities continue to improve their compliance status with new and existing civil rights laws. There is a significant reduction in the time required for Title VI certification of facilities making application to provide services under Medicare/Medicaid.

Within the year there were only three complaints filed with the Office for Civil Rights against the estimated 500 Medicaid facilities in Alabama. This is significant when compared with statistics of other states in the region.

Compliance Division statistics reflect a continuing increase in minority utilization and participation in Alabama's health programs and services, as indicated below:

NURSING HOMES	1969	1971	1973	1975	1977	1979
Multi-racial	46.4	62.3	83.6	89.9	94.7	97.8
White Only	47.7	32.1	15.3	9.5	4.5	2.2
Nonwhite Only	5.9	4.5	1.1	.6	.8	.0

The responsibility of Title VI surveys has been transferred from the Compliance Division to the Field Services Division of the Bureau of Licensure and Certification. Title VI on-site reviews will be conducted as part of the Medicare/Medicaid survey. Compliance Division continues to monitor and make compliance determinations.

The Compliance Division continues its efforts to implement and monitor compliance with Section 504 of the Rehabilitation Act of 1973. Other state agencies are provided consultation and assistance in interpreting and complying with Section 504. Efforts are made to ensure a uniform approach to implementing and monitoring compliance with the requirements of this section.

On April 16, 1979, the Compliance Division entered into a formal agreement with the Food and Nutritional Services Division of the Department of Agriculture to conduct compliance reviews of the State WIC Program. This agreement was initiated primarily to avoid duplication of effort and to ensure consistency in the Department of Agriculture and the Department of HEW requirements for Title VI.

During 1979, there was active coordination between the Compliance Division of the Bureau of Licensure and Certification and the State Health Personnel office in matters relating to equal employment opportunities and affirmative action.

From the federal level, emphasis was placed on enforcement of Title VII provisions for equal employment opportunities. By Executive Order the Equal Opportunity Commission, Civil Service Commission, Department of Labor, and Department of Justice were directed to adopt uniform guidelines on employee selection procedures as provided under Title VII. These uniform guidelines are designed specifically to ensure that employee selection procedures will result in increased employment of minorities and women and further provides for increased monitoring of employment practices of all recipients of federal financial assistance.

During the year regulations were issued implementing the Pregnancy Discrimination Act that forbids discrimination on the bases of pregnancy, childbirth, and related medical conditions. From the standpoint of employment, this law provides that pregnancy be treated as any other disability. Regulations implementing the Age Discrimination Act of 1975 parallels Title VI of the Civil Rights Act of 1964 in that it prohibits discrimination on the basis of age in the delivery of services.

DIVISION OF FIELD SERVICES

FACILITY CLASSIFICATION	LICENSURE INSPECTION	CERTFICATION SURVEYS	POST. CERT. VISITS	CONSULTATION VISITS	COMPLAINTS SPECIAL INV.
Hospitals	138	147	146	23	35
Nursing Homes	232	225	193	196	144
C. P. Treatment Centers	2	0	0	0	0
Domiciliary Care Facilities	9	0	0	0	0
HMO	0	0	0	0	0
Independent Clinical Laboratories	80	43	21	2	0
Maternity Homes	2	0	0	0	0
Rehabilitation Centers	0	9	0	0	1
ESRD	0	16	0	0	0
Home Health Agencies	0	85	20	4	1
Independent Physical Therapists	0	0	0	0	0
Mental Health Centers	0	0	0	0	0
Rural Health Clinics	0	15	12	4	0

Division of Field Services

Teams of professional personnel continued to survey hospitals, skilled nursing homes, intermediate care facilities, domicilliary homes, home health agencies, independent medical laboratories, cerebral palsy treatment centers, providers of outpatient physical therapy and speech pathology services, end-stage renal disease dialysis facilities, and rural health clinics.

Beginning in October all surveys have been conducted on an unannounced basis in accordance with instructions from the Governor's office.

Licensure Division

The Licensure Program activities were continued with inspections made to all facilities subject to licensure. Recommendations based on the results of the visits were submitted to the Licensure Advisory Board for types of licenses to be issued. After consideration by the Licensure Advisory Board, the recommendations were forwarded to the State Committee of Public Health for approval. Subsequently, all licenses were issued and received by facilities, with the exception of one facility that did not submit an application with fee prior to the beginning of the 1980 calendar year.

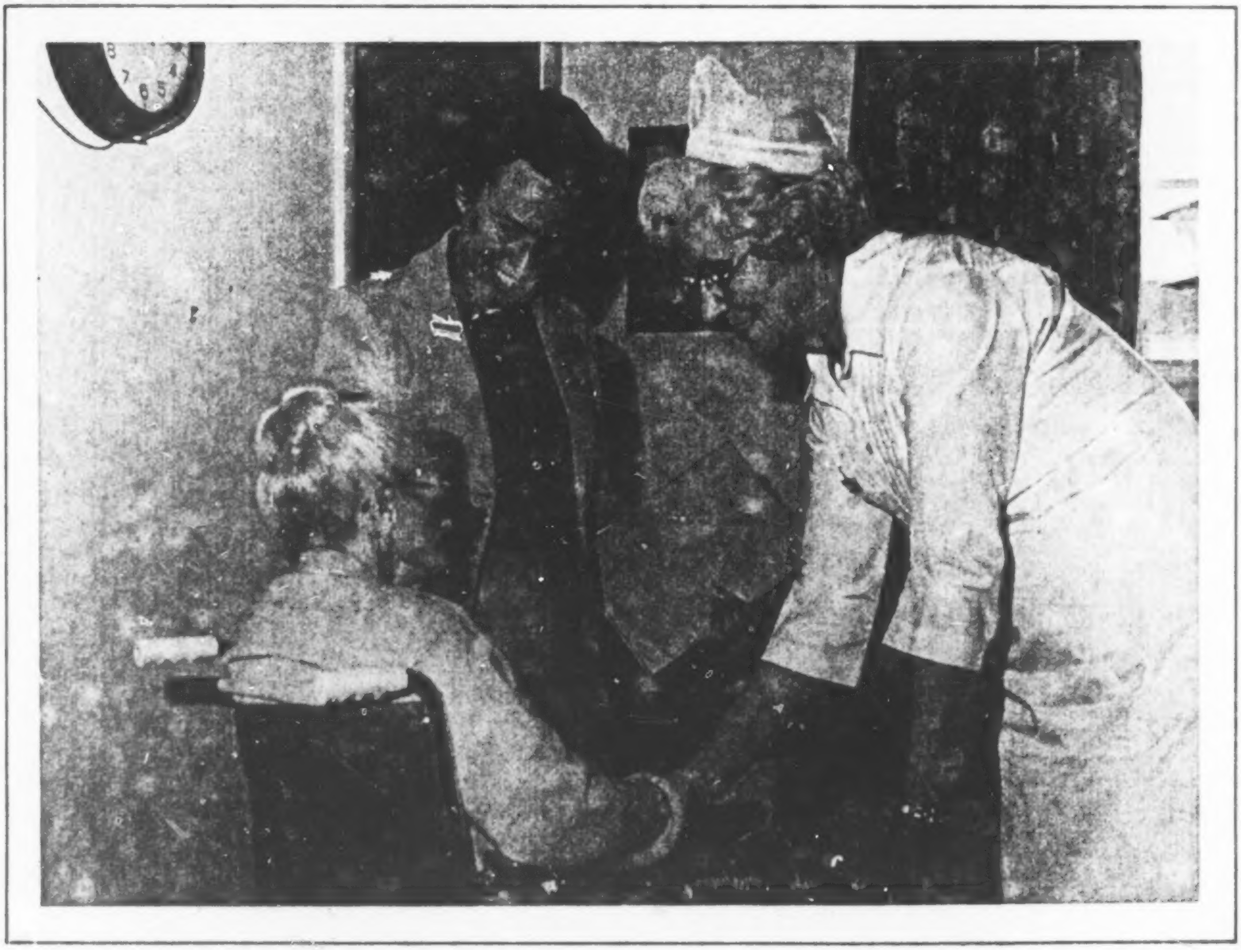
One approved research project studying the feasibility of allowing food to be prepared in a centrally located hospital for distribution to three nursing homes under the same control and in close proximity was concluded. While the project was ongoing, it was determined that the patients were receiving a higher quality diet and the services relative to food service improved. Two of the three nursing homes showed a reduction in the cost of the meals during the project. The third nursing home's failure to show a cost reduction in meals seemed to have resulted from the food service cost reports kept prior to the beginning of the project. The recommendation made and approved by the State Committee of Public Health was to allow the food delivery system to be continued at the facilities involved. For other facilities interested in this system, prior approval from the State Committee of Public Health would be required.

A new research project was approved by the State Committee of Public Health and begun November, 1979, for one year to evaluate the requirements and needs of a facility providing hospice care. The facility involved is a 137 bed skilled nursing facility with provisions for 10 inhouse hospice patients and up to 24 outpatients. The recommendation for approval of this project was influenced by the resources of the specific professional people available to the facility.

The regular session of the 1979 Legislature passed Act 79-798 which amended the definition of the term "hospital" to include end stage renal disease centers, rehabilitation centers, abortion clinics, and ambulatory surgical centers. The Act originated in this bureau as a companion bill to the Certificate of Need statutes which has its power in the authority to grant licenses. The authority to license health care facilities are consistent with the Certificate of Need requirements except for licensure of home health agencies which was deleted from the bill prior to action by the legislature.

The facilities coming under the jurisdiction of the amendment to the term "hospital" were not licensed in 1979. The Licensure Advisory Board, with the concurrence of the State Committee of Public Health, requested that applicable rules, regulations and standards be developed prior to the issuance of licenses. The drafts are in the final revision stages prior to being submitted to the Licensure Advisory Board for their approval.

Another Legislature Act 79-577 (Regular Session 1979) which implemented the Certificate of Need affected the operation of the bureau by rescinding the section of the licensure statute that allowed the licensure of hospitals as long as the minimum uniform standards of the State Board of Health as to sanitation and care of patients were met. The coordination of the Certificate of Need program with licensure has been uneventful due to the willingness and desire of all agencies involved to support the intent of the program. The integrity and professionalism of the staff of the State Health Planning and Development Agency was evident during the transfer of the agency from the State Board of Health to the State Health Planning and Development Agency Board.



Administrative proceedings were begun in September to revoke the license of a hospital which closed in June. The facility did not surrender its license as requested after a three month period of being closed. After the notice of legal action was served on the facility, the license was mailed to the bureau, and legal action was halted. The hospital did not apply for licensure for 1980.

Additionally, one nursing home, nine independent clinical laboratories, and one domiciliary were opened and licensed. One hospital and two independent clinical laboratories voluntarily discontinued operation. Overall, the licensure program experienced a net gain of 8 facilities, 281 hospital beds, 289 nursing home beds and 76 domiciliary and related facility beds. There were 17 changes of operational control of licensed facilities in 1979. The following chart provides a comparison at the beginning and end of the year for those facilities licensed by the State Board of Health.

LICENSED HEALTH CARE FACILITIES

	NUMBER OF FACILITIES		NUMBER OF BEDS		GAINS/LOSSES	
TYPE OF FACILITIES	1/1/79	12/31/79	1/1/79	12/31/79	FACILITIES	BEDS
Hospitals	138	137	19,979	20,260	-1	+281
General	131	130	19,212	19,476	-1	+264
*Special	7	7	767	784	0	+17
Nursing Homes	211	210	20,259	20,548	-1	+289
Skilled Nursing Home	54	53	4,522	4,547	-1	+25
Nursing Home (Unskilled)	23	22	1,289	1,235	-1	-54
SNH/NH	134	135	14,448	14,766	+1	+318
Maternity Homes	2	2	70	70	0	0
Mental Health Centers	1	1	24	24	0	0
Cerebral Palsy Treatment Centers	2	2	99	99	0	0
Domiciliaries	9	10	508	584	+1	+76
Health Maintenance Organizations	0	0	0	0	0	0
Independent Clinical Laboratories	63	70	N/A	N/A	+7	N/A
TOTAL	426	432	40,939	41,585	+8	+646

*Types of hospitals designated as "special" are: chronic, mental, pediatric, eye and rehabilitation.

Hearing Aid Licensing Division

Title 34, Chapter 14, 1975 Code of Alabama establishes the legal basis for licensing of hearing aid dealers and fitters. This licensure law became effective October 1, 1971, with the signature of Governor George C. Wallace. Persons who select, fit, and sell hearing aids must demonstrate that they are qualified before they can be licensed. Examinations for the purpose of licensure are held twice yearly in the months of January and July. A five year summary of hearing aid licensing activity follows:

Calendar Year	Regular License Renewals	Temporary Permits Issued	Passed Examination	Failed Examination
1975	110	62	18	8
1976	115	58	18	2
1977	112	24	10	3
1978	106	40	12	1
1979	103	28	12	4

The hearing aid dealers licensure law provides for the establishment of a Board of Hearing Aid Dealers. Members of the Board are appointed by the Governor from a list of qualified persons nominated by the Alabama Hearing Aid Dealers Association, Inc. The Board consists of five hearing aid dealers, one otolaryngologist and one audiologist. Members must be residents of the state. During the calendar year of 1979, three vacancies existing on the Board were filled by appointments made by the Governor. These appointments included an otolaryngologist and an audiologist.

The Alabama Board of Hearing Aid Dealers has for several years proposed legislation authorizing the board to promulgate rules and regulations for the purpose of better carrying out the provisions of the law. Since the legislature has failed to pass such legislation, in 1980 the Board will seek to have the law amended in order to provide a smoother licensure program. The Board also plans to conduct several educational programs for the benefit of all licensees in the state in 1980.

Plans and Construction Division

To ensure safe, functional and efficient health facilities, the Plans and Construction Division, with expertise in architecture, engineering and construction, reviews plans and inspects buildings. Thereby building standards essential for the best possible patient care are maintained.

The division enforces the building regulations which the State Board of Health has established as a part of the licensing requirements for hospitals, nursing homes and domiciliaries. These standards prescribe necessary functional elements, establish minimum requirement for patient environment and require that specified building, fire and safety codes are met.

Federally aided health projects, including those given grants, loans and loan guarantees, are also reviewed and inspected by this office. The federal agencies include the Department of Health, Education, and Welfare, the Department of Housing and Urban Development, Applachian Regional Commission, and the Farmers Home Administration.

	Private Financing	Federally Aided
Projects Reviewed	142 (3818 beds)	9 (no beds)
Projects Under Construction	113 (2881 beds)	8 (no beds)
Projects Completed	60 (833 beds)	7 (no beds)

A condition for participation in Medicare and Medicaid is that hospitals and nursing homes maintain their buildings in compliance with the Life Safety Code of the National Fire Protection Association. The division makes annual inspections, reviews plans, consults and performs necessary follow-up work to enforce this program at all hospitals (except those accredited by the Joint Commission) and nursing homes in Medicare-Medicaid. Employees performing these tasks act in the role of deputy inspector or building construction engineer.

During 1979, 260 Life Safety Code inspections and 252 follow-up visits were made to 31 hospitals, 188 skilled nursing homes, 22 intermediate care facilities and three ICF/MR.

Staff training, fire drills, evacuation plans, fire control procedures, disaster plans and smoking regulations are incorporated in the fire safety consultation and education.

The health care industry has become so complex with continual innovations in equipment and services that buildings must be more flexible and expandable. Long-range planning is already saving millions of dollars both in construction and increased efficiency of personnel. The division works with every facility involved in construction to ensure that buildings are as functional as possible and will respond to needs of the future.

FACILITIES UNDER CONSTRUCTION HOSPITALS

	Number of Beds
Baptist Medical Center/Montclair (LSC) Birmingham	0
Baptist Medical Center/Montclair (LTC-ICU-Ancillary Expansion) Birmingham	137
Baptist Medical Center/Montclair (Parking Deck) Birmingham	0
Baptist Medical Center/Montclair (Nuclear Medicine) Birmingham	0
Baptist Medical Center/Princeton (Power Plant) Birmingham	0
Baptist Medical Center (LTC) Montgomery	47
Baptist Memorial Hospital Gadsden	27
Boaz-Albertville Hospital Boaz	0
Brookwood Medical Center (Lobby and Business Office) Birmingham	0
Brookwood Medical Center (NS) Birmingham	0
Brookwood Medical Center (Ambulatory Care) Birmingham	0

	Number of Beds
Brookwood Medical Center (X-ray) Birmingham	0
Brookwood Medical Center (Pain Center) Birmingham	0
Brookwood Medical Center (Diet) Birmingham	0
Brookwood Medical Center (Medical Records, Administration) Birmingham	0
Carraway Medhodist Medical Center Birmingham	0
Childrens Hospital Birmingham	0
Cobb Memorial Hospital Phenix City	52
Colbert County Hospital (Helen Keller Memorial Hospital) Sheffield	0
Columbia General Hospital (LSC) Andalusia	0
Community Hospital Birmingham	0
Eliza Coffee Memorial Hospital Florence	0
Flowers Hospital Dothan	0
George Lanier Memorial Hospital Langdale	52
Guntersville Hospital Guntersville	0
Holy Name of Jesus Hospital (Cardiac) Gadsden	0
Holy Name of Jesus Hospital (ICU) Gadsden	5
Huntsville Hospital (LTC-Psychiatric-Gen. Hospital) Huntsville	70

	Number of Beds
Huntsville Hospital (Radiation Therapy) Huntsville	0
Huntsville Hospital (Delta Scanner) Huntsville	0
Jackson Hospital and Clinic (West Wing) Montgomery	0
Jackson Hospital and Clinic Montgomery	0
D. W. McMillian Memorial Hospital Brewton	0
Medical Center Hospital (X-ray) Huntsville	0
Medical Center Hospital Huntsville	27
Mobile Infirmary (Linear Accelerator) Mobile	0
Mobile Infirmary Mobile	27
Mobile Infirmary (Neuro ICU) Mobile	0
Mobile Infirmary (EMI Scanner) Mobile	0
Mobile Infirmary (Rotary) Mobile	
Monroe County Hospital (Addition) Monroeville	21
Monroe County Hospital (Addition) Monroeville	24
Northeast Alabama Regional Medical Center (Psychiatric) Anniston	44
North Jackson Hospital (Smoke Partitions and Doors) Bridgeport	0
North Jackson Hospital (Administrative Offices) Bridgeport	0
New Vaughn Memorial Hospital	0

	Number of Beds
Selma	
New Vaughn Memorial Hospital	0
Selma	
Providence Hospital (ICU-Labor Rooms) Mobile	0
Providence Hospital (Dialysis Stations) Mobile	0
Providence Hospital	0
Mobile	
Providence Hospital	0
Mobile	
Randolph County Hospital	0
Roanoke	
Red Bay Hospital	0
Red Bay	
Russell Hospital	0
Alex City	
St. Clair County Hospital	0
Pell City	
St. Margarets Hospital	0
Montgomery	
St. Vincents Hospital	80
Birmingham	
St. Vincents Hospital (LTC)	33
Secure Medical Center	0
Tuscaloosa	
Southeast Alabama General Hospital	137
Dothan	
South Highlands	0
Birmingham	
Springhill Memorial Hospital	100
Mobile	
Tri-River Hospital	75
Dothan	
UAB	0

	Number of Beds
Birmingham	
UAB	0
Birmingham	
UAB	0
Birmingham	
UAB (LSC) Birmingham	0
UAB	0
Birmingham	
UAB (14th Floor East) Birmingham	0
UAB	3
Birmingham	
UAB (11th Floor East Building #7) Birmingham	0
UAB (Renal Transplant) Birmingham	0
UAB (Electrical Closets) Birmingham	0
UAB (Kidney Transplant) Birmingham	0
UAB (Tumor Inst.) Birmingham	0
UAB (Electrical Riser) Birmingham	0
UAB (Temp. Family Practice Center) Birmingham	0
USA (Laboratory-Labor Rooms-Recovery) Mobile	0
USA	0
Mobile	
USA	0
Mobile	
Walker County Hospital (New Hospital) Jasper	227

FACILITIES UNDER CONSTRUCTION
NURSING HOMES

	Number of Beds
Apollo Nursing Home Mobile	7
Ashville-Whitney Nursing Home Ashville	37
Burns Nursing Home Russellville	27
Canterbury Nursing Home Phenix City	100
Cedarcrest Nursing Home Montgomery	112
Chapman Nursing Home Alexander City	110
Community Convalescent Center Mobile	182
Cullman Health Care Center Cullman	0
Fairhope Health Care Center Fairhope	43
Gadsden Nursing Home Gadsden	27
Henry County Nursing Home Abbeville	60
Jacksonville Nursing Home Jacksonville	60
Jetkins Health Care Center Bessemer	72
June Little Lodge Bay Minette	54
Kirkwood By the River Birmingham	50
Lakeview Manor Opp	50
Marshall Manor Arab	91
Parkview Village Nursing Home Huntsville	60
Pine Manor Nursing Home Tuskegee	36
Pleasant Grove Nursing Home Pleasant Grove	0
Rolling Acres Nursing Home Florence	59
Twenty-Fifth Avenue Baptist Center Birmingham	150
Southern Nursing Center Cullman	97
Wesley Terrace Auburn	55
West Limestone Manor Lester	44
Wilder Nursing Home Dadeville	0
Wiregrass Nursing Home Geneva	33
Wiregrass Manor Nursing Home Dothan	77

OTHER UNDER CONSTRUCTION

	Number of Beds
Albert Brewer Developmental Center Mobile	0
Lindsey Aquatic Center/Partlow Tuscaloosa	0
Tarwater Developmental Center Wetumpka	0
Thomasville Adjustment Center Thomasville	0

FACILITIES APPROVED HOSPITALS

	Number of Beds
Baptist Medical Center/Montclair	0
Birmingham	
Baptist Medical Center/Montclair (Caisson) Birmingham	137
Baptist Medical Center/Montclair	0
Birmingham	
Baptist Medical Center/Princeton (Power Plant) Birmingham	0
Boaz-Albertville Hospital	0
Boaz	
Brookwood Medical Center	0
Birmingham	
Brookwood Medical Center	0
Birmingham	
Brookwood Medical Center	0
Birmingham	
Brookwood Medical Center	0
Birmingham	
Brookwood Medical Center	0
Birmingham	
Cobb Memorial Hospital	52
Phenix City	
George Lanier Memorial Hospital	52
Langdale	
Monroe County Hospital	21
Monroeville	
Northeast Alabama Regional Medical Center	44
Anniston	
New Vaughn Memorial Hospital	0
Selma	
New Vaughn Memorial Hospital	0
Selma	
New Vaughn Memorial Hospital	0
Selma	
Providence Hospital	0
Mobile	
Retreat Hospital	
Decatur	
St. Clair County Hospital	0
Pell City	
Shelby Memorial Hospital	0
Alabaster	
Shelby Memorial Hospital	1
Alabaster	
St. Clair County Hospital	0
Pell City	
Secure Medical Center	
Tuscaloosa	
Springhill Memorial Hospital	100
Mobile	
Tri-River Hospital	75
Dothan	

FACILITIES APPROVED NURSING HOMES

	Number of Beds
Apollo Nursing Home	7
Mobile	
Cedarcrest Nursing Home	112
Montgomery	
Chapman Nursing Home	110
Alex City	
Community Convalescent Center	120
Mobile	
Cullman Health Care Center	0
Cullman	
Fairhope Health Care Center	43
Fairhope	

	Number of Beds
Gadsden Nursing Home	27
Gadsden	
Henry County Nursing Home	60
Abbeville	
Jacksonville Nursing Home	60
Jacksonville	
Kirkwood By the River	50
Birmingham	
Parkview Village Nursing Home	60
Huntsville	
Pine Manor Nursing Home	36
Tuskegee	
Pleasant Grove Nursing Home	0
Pleasant Grove	
Wilder Nursing Home	0
Dadeville	
Wiregrass Nursing Home	33
Gevena	

FACILITIES COMPLETED HOSPITALS

	Number of Beds
Athens-Limestone Hospital	0
Athens	
Baptist Medical Center	47
Gadsden	
Baptist Medical Center/Family Practice Center	0
Gadsden	
Bessemer Carraway Medical Center	31
Bessemer	
Carraway Methodist Medical Center	0
Birmingham	
Coffee General Hospital	0
Enterprise	
Colonial Manor Hospital	0
Florence	
Community Hospital	0
Birmingham	
Cooper Green Hospital	0
Birmingham	
Cooper Green Hospital	0
Birmingham	
Cullman County Hospital	24
Cullman	
Doctors Hospital Mobile	106
Mobile	
Druid City Hospital/Ed Tower	0
Tuscaloosa	
East End Memorial Hospital	0
Birmingham	
East Tallspoosa Hospital	18
Dadeville	
Fayette County Hospital	0
Fayette	
Greenlawn Hospital	0
Atmore	
Hartselle	0
Hartselle	
Hillcrest Hospital	0
Birmingham	
Lamar County Hospital	25
Vernon	
Medical Center Hospital	0
Huntsville	
Lloyd Noland Hospital	0
Fairfield	
Lloyd Noland Hospital	0
Fairfield	
Mobile Infirmary	25
Mobile	

Northeast Alabama Regional Medical Center Anniston	0
New Vaughn Memorial Hospital Selma	0
Retreat Hospital Decatur	0
St. Clair County Hospital Pell City	0
Shelby Memorial Hospital Alabaster	0
Shelby Memorial Hospital Alabaster	1
South Highland Hospital Birmingham	0
Southeast Alabama Medical Center Dothan	137
Stringfellow Memorial Hospital Anniston	0
UAB (Materials System) Birmingham	0
UAB (East Base) Birmingham	160
UAB (General Services) Birmingham	0
UAB (Fire Alarm) Birmingham	0
UAB (Trash Compactor) Birmingham	0
UAB (Diabetes Hospital) Birmingham	0
USA Medical Center Mobile	0
USA Medical Center Mobile	0
West Alabama General Hospital Northport	0
West Alabama General Hospital Northport	0

FACILITIES COMPLETED NURSING HOMES

	Number of Beds
Mary Brandon Nursing Home Oxford	31
Dothan Nursing Home Dothan	3
Fairview Nursing Home Birmingham	0
Jefferson County Home Birmingham	0
Jefferson County Home Birmingham	0
Lamar Convalescent Center Vernon	29
Lineville Geriatric Center Lineville	5
Marengo County Nursing Home Linden	10
Methodist Home for the Aging Birmingham	0
Piedmont Nursing Home Piedmont	1
Self Nursing Home Hueytown	75
Twin Oaks Nursing Home Mobile	0

OTHER FACILITIES COMPLETED

	Number of Beds
Family Practice Center for Baptist Hospital of Gadsden Gadsden	0
St. Martins in the Pines Birmingham	105
United Cerebral Palsy of Birmingham Birmingham	0
Walker County Health Center Jasper	0

Division of Quality Control and Training

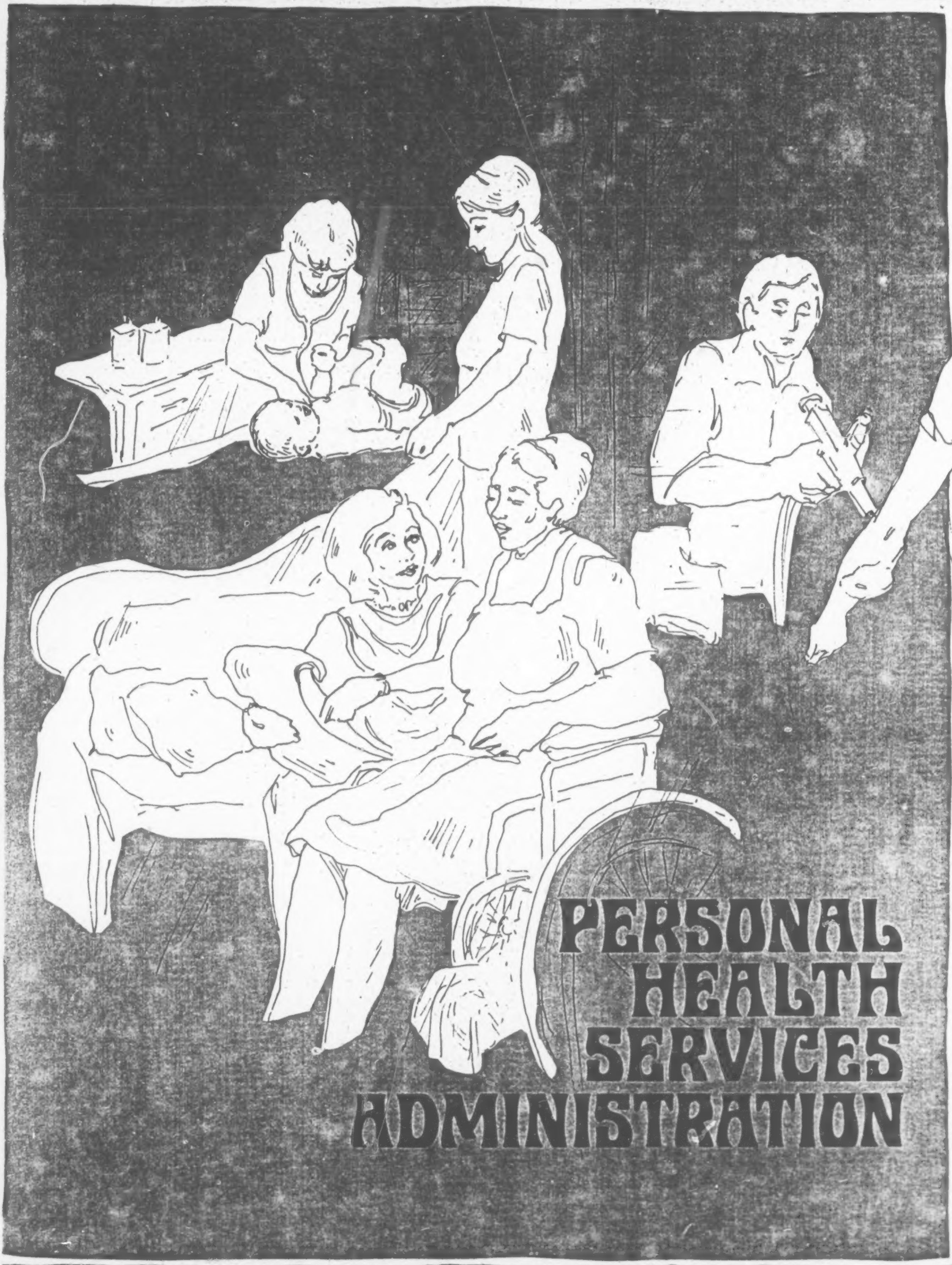
In the latter part of 1978, the Quality Control and Training Division was established. This division was established by combining two separate existing divisions. The purpose of this division is to monitor quality of work performed, mainly by members of the Field Services Division, and to provide integrated training for health facility surveyors.

The major emphasis of this division has been to improve coordination and uniformity between surveyors and between the various programs administered by the bureau. Survey, inspection, licensure and Medicare/Medicaid activities are in an almost continuous state of change as new laws, new or revised regulations and new concepts of quality of patient care evolve. These changes are monitored and the quality and uniformity of application are studied to make adjustments where indicated.

One study conducted was a three month survey of the incidents of development of decubiti in hospitals versus its development in nursing homes. This study was prompted by allegations from nursing homes that most of the patients with decubiti had developed the ulcers in hospitals before being admitted to the nursing home. The survey revealed about half of the ulcers developed in each type facility. One of the benefits derived from this survey was a more concerted involvement in assessment of such conditions during surveys.

A health care facility surveyor must know or gain and be able to utilize a wide range of knowledge. Unless the newly employed surveyor has had considerable prior experience, extensive training is required to develop the knowledge and attributes required. The attribute of dedication to welfare of patients is a pre-requisite.

A combined textbook, audio-visual and facility visit system is used to train newly employed surveyors. Time in training a new surveyor can vary from six months to a year depending on the person's background. During 1979, eight new surveyors were trained or are in the process of being trained. New training materials and methods are currently being developed and implemented. This process is a joint effort on the part of the federal government and this bureau.



PERSONAL HEALTH SERVICES ADMINISTRATION

Personal Health Services Administration unifies the diverse programs and activities of the Division of Epidemiology, the Special Supplemental Food Program for Women, Infants, and Children, the Bureau of Clinical Services, the Bureau of Local Health Services, the Bureau of Maternal and Child Health/Family Planning, and the Bureau of Public Health Nursing. The purpose of this administration is to maintain coordination between the divisions, bureaus, and programs from the top echelon of management to the individual employee delivering services to Alabamians. The Administration establishes the operating policies and procedures, administers and evaluates the effectiveness and efficiency of the various programs, checks on the quality of services rendered, and supervises methods of operation.

The Publications and Form Review Committees were formed and became functional during 1979. The purpose of these two committees, which meet monthly, is to review forms and publications used by the programs in Personal Health Services Administration for purpose, content, the elimination of duplication.

Budget justification and objective-setting discussions were held with all programs. Objectives are continually monitored and updated in order to better measure the efficiency and effectiveness of the programs.

In addition to management and supervision, the administration provides professional and technical assistance and serves as liaison with various other health department units and outside agencies which have a bearing on the operation of the administration.

DIVISION OF EPIDEMIOLOGY

The Division of Epidemiology has traditionally had the role of investigating outbreaks or epidemics of disease and implementing control measures to control disease. In recent years the Division of Epidemiology has expanded its services to include such diverse services as program evaluation, chronic disease consultative services in such diseases as cancer and hypertension, and investigation of environmental and occupational diseases. Over the past year there has been a marked increase in the demand for epidemiologic services. Not only has there been an increased demand for epidemiologic investigation of environmental and occupational diseases and for continued consultation in program evaluation and in chronic diseases, but there has also been an increased demand for investigation of acute infectious disease outbreaks. During 1979 the Division of Epidemiology has responded to 159 requests for assistance and/or consultation. Of these, 102 represented investigation and control measures for acute infectious disease outbreaks; 47 represented investigation and elimination of environmental and occupational hazards and/or diseases caused by environmental contamination; and 10 represented consultation on program evaluation or chronic diseases.

In spite of this marked increase in services demanded from the Division of Epidemiology, the division continues to suffer from a lack of personnel. During 1979, the division lost one-third of its field force when the U.S. Center for Disease Coftrol failed to replace the epidemiologist whose term had expired. This employee was a physician assigned by the Center for Disease Control to the Alabama Department of Public Health. He was to receive additional field training in epidemiology in exchange for providing assistance to the state in disease investigation and epidemiology. There is an imperative need to replace this individual with a permanent state employee.

During 1979 the Division of Epidemiology began several new programs in an effort to modernize the state's disease control procedures. Probably the most important of these is initiation of the Communicable Disease Report. This report is disseminated to health care providers and other interested parties to provide information on diseases which are currently threatening the Alabama population. The Communicable Disease Report is published monthly and provides feature and short articles on currently prevalent diseases and disease trends. Also during 1979 the Division of Epidemiology initiated a program of developing policy guidelines to be used in the county health departments. These guidelines are intended to provide protocols for investigation of cases of specific disease and initiation of control measures. These will enable the county health departments to proceed on routine disease control matters in a more expeditious manner and provide uniform disease control measures throughout the state. During 1979, the Division of Epidemiology also requested all county and district health departments to appoint an epidemiology liaison person to interface with the Division of Epidemiology and carry out epidemiologic functions on the local level. In conjunction with this, the first semiannual meeting of epidemiology liaison personnel took place in July, 1979. These meetings present an opportunity for group discussion among those involved in disease control matters throughout the state. Additional training and continuing education by the Division of Epidemiology is provided in conjunction with these meetings for the liaison personnel.

The Division of Epidemiology also took steps to modernize the disease reporting process. This was initiated by drafting new legislation which will enable an alteration and modernization of the list of reportable diseases. This proposed legislation will enable an alteration and modernization of the list of reportable diseases. This proposed legislation will be presented to the Legislature in 1980. With passage of the legislation, the list of reportable diseases can be reduced from over 50 to fewer than 30 common reportable diseases. More importantly the new list of reportable diseases will be limited to those diseases on which public health action is required. The old list contained many diseases which did not require public health action, and it used some 19th century terminology which no longer applies to disease entities as we know them today. This led to confusion and failure to report on the part of physicians.

Food and waterborne illness comprised the largest single category of requests for assistance. The division investigated or provided assistance with the investigation of 25 outbreaks of food or waterborne illness; three of these were institutional outbreaks involving food handling services within state operated institutions. Of particular importance is the investigation of several outbreaks involving disease associated with consumption of oysters. Both a cholera-related gastrointestinal illness and hepatitis A have been attributed to contaminated oysters during 1979.

The second largest single group consisted of requests for assistance in evaluation and control of hepatitis. There were 21 outbreaks of hepatitis investigated and appropriate control measures were taken. Several hundred people received immune serum globulin prophylaxis as a result. Spread of disease or potential spread of disease within hospitals, nursing homes, or laboratories in Alabama was involved in 13 investigations.

During 1979, the Division of Epidemiology increased its commitment to provide consultation on hospital infection control and related problems. The division is attempting to develop a relationship with hospital infection control nurses throughout the state and with the Alabama Chapter of the Association of Practitioners of Infection Control. This relationship will help us provide the necessary resources to hospitals to assist them in controlling the spread of infection within their institutions. In return we hope to establish a system of hospital-based reporting of many of the reportable diseases, thereby giving us a view of what diseases are prevalent throughout the state. We hope that this new relationship will lead to more complete reporting than has occurred in the past.

During 1979 the Division of Epidemiology was involved in four investigations of diseases occurring in day-care centers caring for preschool children. Various diseases, especially hepatitis and shigellosis, are known to spread rapidly in these institutions. Disease spreads not only among the children attending the day-care center but also among day-care center staff and the families of the attendees, including parents and siblings. The division is working with the Department of Pensions and Security and the county health departments in developing a set of guidelines for better disease control in day-care centers.

The Division of Epidemiology participated with the U.S. Center for Disease Control in investigating the health effects of DDT contamination of Huntsville Spring Branch and Indian Creek in Madison County. An epidemiologic study was carried out to evaluate the health effects on the residents of Triana who have for a long period of time eaten fish from these two contaminated waterways. In addition to this investigation, 46 other investigations involving environmental contamination and/or occupational exposure to toxins were performed by the Division of Epidemiology. Lead poisoning was involved in five, two involved mercury toxicity, and 10 involved contaminated bird roosts or buildings which resulted in cases of histoplasmosis.

Histoplasmosis continues to be a problem. During 1979 the Division of Epidemiology provided consultation on the decontamination of three bird roosts and two buildings which were responsible for producing cases of histoplasmosis. Consultation was also provided for the decontamination of a building contaminated with cryptococcus spores.

In its work, the Division of Epidemiology must coordinate its activities with all other parts of the State Health Department and with other state, local, and federal agencies. Particular close cooperation is necessary with the Environmental Health Administration of the state health department. In cases of environmental contamination, the Environmental Health Administration provides consultation on the engineering and technical aspects of handling the contamination while the Division of Epidemiology provides information on the medical, toxicologic and epidemiologic effects of these problems. A close working relationship has developed between the Environmental Health Administration of the state health department and the Division of Epidemiology, enabling us to begin to develop expertise in this area. There is a strong need for an additional epidemiologist who specializes in environmental and toxic effects to handle the increased workload in this area.

The Division of Epidemiology depends on the valuable services and continued support of the Clinical Laboratory Administration and the local health departments for achieving program goals.

1979
CASES OF COMMUNICABLE DISEASES

DISEASES	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Tuberculosis	1,203	1,166	985	918	790	785	780	824	704	672	644
Syphilis	533	391	445	405	442	519	542	432	350	421	577
Gonorrhea	6,261	8,470	10,852	15,934	19,704	21,673	24,418	25,026	24,936	25,082	26,012
Chancroid	9	4	2	6	2	2		1			
Amebic dysentery	6	5	1	3	2	4	1	4	1	5	2
Chickenpox	441	776	538	535	904	570	1,018	659	1,060	915	525
Diphtheria	5	20	17	7	6						
Encephalitis	5	7	10	28	19	9	78	87	12	16	28
German measles	136	396	233	63	210	66	23	2	110	25	44
Hepatitis, infectious		431	384	382	478	323	304	218	212	224	267
Hepatitis, serum		16	39	101	195	186	259	221	175	168	236
Hepatitis, unspecified						42	43	35	74	57	120
Influenza	50,059	37,280	1,125	23,697	2,013	5,419	6,309	1,471	3,123	3,609	3,703
Malaria	25	27	23	18	5		6	2	6	2	6
Measles	12	430	2,035	161	14	21	5		79	102	129
Meningitis, aseptic		146	118	86	139	59	159	136	183	148	289
Mening., meningococcal		27	36	20	19	13	32	40	61	52	41
Mumps	236	410	1,044	860	758	618	454	368	400	437	28
Pellagra				1							
Pneumonia	4,173	4,277	3,687	3,806	3,760	4,163	4,012	3,579	3,904	4,564	4,988
Poliomyelitis	1					1					
Rheumatic fever	120	119	89	85	256	70	710	76	407	11	11
Rheumatic heart	194	211	286	186	768	172	279	150	134	138	79
Rocky Mt. spotted fever	6	12	9	20	28	14	10	15	20	13	21
Salmonella	259	344	275	346	404	328	329	382	425	486	474
Scarlet fever*	6,677	5,389	5,201	6,313	4,686	6,244	6,033	6,230	3,888	4,702	3,535
Shigella	87	110	115	98	121	130	208	114	125	246	121
Smallpox											
Tetanus	8	6	4	3	4	1	1	2	3		5
Tularemia		1	3	1		2			1	1	
Typhoid fever	4	8	8	11	14	4	3	1	1	3	8
Typhus fever	1									1	
Undulant fever			2	2		1	3	3	2	1	3
Whooping cough	38	26	85	30	15	20	46	6	4	3	4

* Includes strep. throat

1979
SEASONAL OCCURRENCE OF DISEASES

DISEASES	January	February	March	April	May	June	July	August	September	October	November	December
Tuberculosis	46	38	56	44	58	66	30	57	58	50	35	106
Syphilis	48	44	60	43	40	38	53	65	29	49	45	63
Gonorrhea	2,205	1,771	1,775	2,052	2,265	2,317	2,144	2,097	2,894	1,956	1,799	2,737
Chancroid												
Amebic dysentery			1									1
Chickenpox	74	62	113	107	110	26	5	4	2	5	6	11
Diphtheria												
Encephalitis		2	1	1	1		1	8	8	3	1	2
German measles	1	8	5	5	12	5	5	1	2			
Hepatitis, infectious	13	11	33	13	25	17	15	17	18	43	20	42
Hepatitis, serum	12	14	24	15	19	21	12	16	27	21	17	38
Hepatitis, unspec.	3	5	9	4	11	6	5	4	18	12	14	29
Influenza	199	3,246	217	21	5	7	1			3	1	3
Malaria				1	1			1			1	2
Measles	2	14	12	12	6	28	6	3	1	1	17	27
Meningitis, aseptic	15	11	12	3	7	11	33	45	36	39	51	26
Men., meningococcal	1	5	11	5	1	5	4	4		2	1	2
Mumps	2	2	5		2	6	3	2	1	1	2	2
Pellagra												
Pneumonia	521	733	735	459	328	350	281	185	286	316	342	452
Poliomyelitis												
Rheumatic fever	3	2			1	1	2			1	1	
Rheumatic heart	2	13	13	4	2	4	2		4	15	14	6
Rocky Mt.spotted fev.	1	2	1		1	2	6	3	1	2	1	1
Salmonella	25	12	24	27	32	44	57	47	86	59	28	33
Scarlet fever*	367	922	445	291	230	159	142	158	261	337	97	126
Shigella	8	6	10	11	18	20	17	7	10	4	3	7
Smallpox												
Tetanus	1	1			2			1				
Tularemia												
Typhoid fever	1		2			2			3			
Typhus fever												
Undulant fever			1						1			1
Whooping cough	1			1		1	1					

*Includes strep. throat

DISEASE INCIDENCE BY AGE GROUP

Age Group	CHICKENPOX					GERMAN MEASLES					HISTOPLASMOSIS					LEGIONNAIRE'S DIS.					MEASLES				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1		3	3	7	13	1	1	1		3															
1	2	4	6	6	18																2	1		1	4
2	5	2	6	1	14	1				1											1				1
3	2	1	4	3	10																	2			2
4	11	5	10	4	30						1				1									1	1
5	11	7	10	6	34																	1	1		2
6	23	18	12	15	68																				
7	35	34	11	19	99		1			1												2			2
8	19	12	14	10	55																1	1		1	3
9	5	13	9	8	35																		1	1	2
10	6	12	4	5	27																1				1
11	6	3	4	9	22												1			1	2	1			3
12	5	1	4	1	11		1			1											3	3		2	8
13	1	2	2	2	7																1				1
14	1	1	1		3		1			1											2		2	1	5
15–19			1	1	2	6	5	2		13											5	3	2	1	11
20–24		2		1	3	8	7		2	17	1				1	1				1	1				1
25–34						2	2			4	2				2				1	1		2			2
35–44												1			1										
45–54														1	1		2	2		4					
55–64		1			1											1	1			2					
65–74																	1			1					
75 +																									
N.S.	1		4		5																	1			1
Total by Race	254		203			36		5			5		1			7		3			36		14		
Total	457					41					6					10					50				
Unclassified	68					3					44					0					79				
Grand Total	525					44					50					10					129				

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DISEASE INCIDENCE BY AGE GROUP

Age Group	MUMPS					RHEUMATIC FEVER					RHEUMATIC HEART					SCARLET FEVER*					WHOOPING COUGH				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1	1				1											2	1	1	3	7		1		1	2
1			1	1	2											3	2	2	5	12					
2	1				1											5	6	6	4	21					
3	1		1		2											12	6	4	3	25		1			1
4	1			1	2											6	13	7	10	36					
5			2	1	3											13	6	8	10	37					
6	1				1											11	10	10	11	42					
7		1		1	2		1			1						12	7	6	13	38					
8	1			1	2											9	7	11	8	35					
9			1		1											6	12	5	6	29					
10							1			1						3	3	6	5	17					
11																2	4	3	7	16					
12									1	1						3	2	1	2	8					
13																2	2		5	9		1			1
14			1		1			1		1						2	2	6	6	16					
15–19	2				2	1				1			1		1	11	18	3	10	42					
20–24				1	1	2			1	3		1			1	4	7	3	6	20					
25–34	1	1	1	1	4			1		1				2	2	11	14	5	14	44					
35–44		1			1				1	1	3	5			8	8	9		4	21					
45–54											3	3	3		9		5		1	6					
55–64											7	6	1		14	2	2	1		5					
65–74						1				1	5	11	2	2	20	4	2			6					
75 +				1	1						6	14	3	1	24	2	1			3					
N.S.																5	1	1	2	9					
Total by Race	12		15			6		5			64		15			280		224			3		1		
Total	27					11					79					504					4				
Unclassified	1					0					0					3,031					0				
Grand Total	28					11					79					3,535					4				

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DISEASE INCIDENCE BY AGE GROUP

Age Group	ENCEPHALITIS					HEPATITIS, INFECTIOUS					HEPATITIS, SERUM					HEPATITIS, UNSPECIFIED					INFLUENZA				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	1	1	1		3	3	4			7						3				3	2	3	1		6
5- 9			1	1	2	7	9	1	1	18	1				1	4	4			8	2	2	4		8
10-14		1	1		2	4	2		1	7	1	2	1	1	5	5	3	1		9	5	11	3		19
15-19	2	2	1		5	13	18	6	5	42	14	14	7	6	41	8	6	2	3	19	2	4	4		10
20-24	1				1	26	21	6	8	61	26	17	5	10	58	11	7	1	2	21	3	8		1	12
25-34	7	3			10	25	22	5	4	56	21	20	17	12	70	9	5	3	1	18	6	10	1	2	19
35-44						13	12	3	4	32	10	10	5	3	28	4	4		1	9	3	1		1	5
45-54	1	1			2	12	8		3	23	8	5	2	2	17	5	3			8	3	9		1	13
55-64	1				1	8	1			9	3	1		1	5	2	3		1	6	4	5	2		11
65-74		2			2	2	2	1	1	6	2			2	4	1	6		1	8	2	1		1	4
75 +						2	1			3		1	1	1	3	2	6			8	1	5		4	10
N.S.						1				1	1				1	1	1			2					
Total by Race	23		5			216		49			157		76			103		16			92		25		
Total	28					265					233					119					117				
Unclassified	0					2					3					1					3,586				
Grand Total	28					267					236					120					3,703				

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DISEASE INCIDENCE BY AGE GROUP

Age Group	MALARIA					MENINGITIS, MENINGOCOCCAL					MENINGITIS, ASEPTIC					PNEUMONIA					ROCKY MT.SPOTTED FEV				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4						13	8	2	1	24	40	37	22	14	113	249	195	221	138	803	3				3
5- 9							1	2	1	4	26	11	5		42	90	85	40	45	260	3	2			5
10-14	1	1			2			1		1	18	10	3	1	32	35	27	13	8	83	2	1			3
15-19							2	1		3	8	4	5	1	18	28	24	15	9	76	1				1
20-24								1		1	9	10	1	2	22	23	34	8	9	74	1				1
25-34	2				2		1			1	11	15	1	6	33	56	76	32	20	184	2	1		1	4
35-44				1	1	1	2			3	4	2	2	2	10	49	50	22	20	141					
45-54						1				1	4	1	2	3	10	81	97	32	29	239	2				2
55-64		1			1	1				1		3			3	116	118	58	24	316					
65-74											1				1	216	154	64	40	474			1		1
75 +														1	1	241	248	73	59	621					
N.S.																	4			4					
Total by Race	5		1			30		9			214		71			2,296		979			18		2		
Total	6					39					285					3,275					20				
Unclassified	0					2					4					1,713					1				
Grand Total	6					41					289					4,988					21				

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DISEASE INCIDENCE BY AGE GROUP

Age Group	SALMONELLA					SHIGELLOSIS					TETANUS				
	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	5	4	2	2	13	1	1	2	1	5					
5- 9			1		1	2	2			4					
10–14	1				1	4	1			5					
15–19							1			1					
20–24	1	1	1	1	4										
25–34	1	2			3	1				1					
35–44	1	1		1	3	1				1					
45–54		1			1						1		1		2
55–64		1	1		2									1	1
65–74		1			1			1		1	1	1			2
75 +		1			1										
N.S.															
Total by Race	21		9			14		4			3		2		
Total	30					18					5				
Unclassified	444					103					0				
Grand Total	474					121					5				

Age Group	TUBERCULOSIS					TYPHOID FEVER				
	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F	
0- 4	1		3	5	9					
5- 9	1		6	2	9					
10–14	1	2	1	1	5	1				1
15–19	1		2	10	13					
20–24	3	1	9	6	19					
25–34	19	7	28	17	71	2			1	3
35–44	21	7	21	9	58	1				1
45–54	37	7	40	16	100				1	1
55–64	32	14	30	12	88					
65–74	54	34	37	11	136			1		1
75 +	32	33	26	17	108					
N.S.	9	3	12	4	28					
Total by Race	319		325			4		3		
Total	644					7				
Unclassified	0					1				
Grand Total	644					8				

ADPH - F - Epi-16

LOW FREQUENCY DISEASE INCIDENCE BY AGE GROUP

Age Group	AMEBIC DYSENTERY										LEPTOSPIROSIS				
	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F	
0- 4															
5- 9															
10–14															
15–19															
20–24											1				1
25–34															
35–44															
45–54															
55–64															
65–74															
75 +															
N.S.															
Total by Race											1				
Total	0										1				
Unclassified	2										1				
Grand Total	2										2				

Age Group	PSITTACOSIS					UNDULANT FEVER				
	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F	
0- 4										
5- 9										
10–14										
15–19										
20–24						1				1
25–34		1			1	1				1
35–44										
45–54						1				1
55–64		1			1					
65–74										
75 +										
N.S.										
Total by Race	2					3				
Total	2					3				
Unclassified	0					0				
Grand Total	2					3				

ADPH - F - Epi-16

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	CHICKENPOX			ENCEPHALITIS			GERMAN MEASLES			INFLUENZA		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	254	203	525	23	5	28	36	5	44	92	25	3,703
Autauga												
Baldwin			40				1	1	2			400
Barbour												50
Bibb												
Blount				1		1						
Bullock												
Butler												
Calhoun							1		1			
Chambers				1		1				9	1	10
Cherokee												
Chilton												
Choctaw												
Clarke										1		1
Clay												
Cleburne												
Coffee				1		1						
Colbert							1		1			
Conecuh												
Coosa												
Covington		1	1									
Crenshaw												
Cullman	2		2	1		1	1		1			
Dale			7		1	1	2	3	6			
Dallas												
DeKalb												
Elmore												
Escambia												
Etowah				2		2	1		1			13
Fayette			1									
Franklin												
Geneva												
Greene												
Hale		1	1									
Henry												
Houston	13		13									
Jackson												
Jefferson	22	94	125	7	2	9	1		1	46	5	86
Lamar												
Lauderdale												
Lawrence												
Lee							1		1			
Limestone	1		1							4	1	5
Lowndes												
Macon												
Madison	23	4	27				2		3	10	1	11
Marengo												
Marion												
Marshall			4	1		1	1		1	1		16
Mobile	187	97	290	3		3	1		2	7	5	3,083
Monroe					1	1						
Montgomery		1	2				1		1	1		2
Morgan												
Perry												
Pickens							1		1			
Pike												
Randolph												
Russell	1	1	2									
St. Clair												
Shelby	1		1							5	2	7
Sumter												
Talladega	2	1	3	2		2	1	1	2	8	10	18
Tallapoosa												
Tuscaloosa	1	2	3	3	1	4	20		0			1
Walker				1		1						
Washington	1	1	2									
Wilcox												
Winston												

Total includes reports not stating race.

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COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	HEPATITIS INFECTIOUS			HEPATITIS SERUM			HEPATITIS UNSPECIFIED			MALARIA		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	216	49	267	157	76	236	103	16	120	5	1	6
Autauga	1	1	2	2		2						
Baldwin	2	1	3	1		1						
Barbour												
Bibb												
Blount	3		3	1		1	1		1			
Bullock												
Butler												
Calhoun				3	2	5	2	1	3			
Chambers		1	1	1		1	1		1			
Cherokee				1		1						
Chilton				2		2	1		1			
Choctaw												
Clarke												
Clay												
Cleburne												
Coffee				1		2						
Colbert	1		1	1	2	4	1		1			
Conecuh	1		1									
Coosa												
Covington	2		2									
Crenshaw				1		1						
Cullman	7		7	4		4	1		1			
Dale	6		6	1		1						
Dallas	2		2				1		1			
DeKalb							1		1			
Elmore	9	2	11	3		3	2		2			
Escambia	2		2	1		1						
Etowah	1		1	4	1	5						
Fayette							1		1			
Franklin	2		2	1		1						
Geneva												
Greene		2	2		1	1						
Hale		2	2									
Henry	2		2	1	1	2						
Houston												
Jackson					1	1	2		2			
Jefferson	48	10	58	40	39	79	25	7	33	1	1	2
Lamar												
Lauderdale	1	1	3				2	1	3			
Lawrence												
Lee						1						
Limestone	3	2	5	2	1	3	1		1			
Lowndes					1	1						
Macon												
Madison	10	2	12	8	2	10	4	2	6	1		1
Marengo	6		6									
Marion												
Marshall	22		22	17		17	27		27			
Mobile	58	23	81	26	12	38	2	1	3	2		2
Monroe	1		1					1	1			
Montgomery	9	1	11	16	7	23	10	2	12	1		1
Morgan	5		5	4	1	5						
Perry							1		1			
Pickens				1		1						
Pike	1		1									
Randolph												
Russell												
St. Clair	1		1	2		2	1		1			
Shelby	3		3	2		2	2		2			
Sumter												
Talladega	3	1	4	1	1	2	3	1	4			
Tallapoosa												
Tuscaloosa	3		3	4	4	8						
Walker	1		1	5		5	3		3			
Washington												
Wilcox												
Winston							8		8			

Total includes reports not stating race.

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COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	MEASLES			MENINGITIS, MENINGOCOCCAL			MENINGITIS, ASEPTIC			MUMPS		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	36	14	129	30	9	41	214	71	289	12	15	28
Autauga												
Baldwin				3		3	1		1			
Barbour												
Bibb							1		1			
Blount	5		5				4		4			
Bullock												
Butler	1		1									
Calhoun			42									
Chambers								1	1			
Cherokee												
Chilton							1		1			
Choctaw												
Clarke	1	1	2									
Clay				1		1						
Cleburne			1									
Coffee							1		1			
Colbert				1		1						
Conecuh							1		1			
Coosa												
Covington							1		1			
Crenshaw												
Cullman			3	1		1	3		3			
Dale				2		2						
Dallas					1	1						
DeKalb												
Elmore												
Escambia								1	1			
Etowah				1		1	3		3			
Fayette	1		1				2	1	3			
Franklin												
Geneva												
Greene					1	1					1	1
Hale												
Henry												
Houston	3		5				1	1	2	1		1
Jackson			11									
Jefferson	4	1	5	10	1	11	129	53	185	3	8	11
Lamar												
Lauderdale							3		3			
Lawrence												
Lee				2		2						
Limestone				1		1	1		1			
Lowndes												
Macon												
Madison	1		1				2	2	5			
Marengo												
Marion						1						
Marshall				1		1	12		12			
Mobile	19	11	44	4	5	9	11	5	16	4	6	11
Monroe												
Montgomery			1	3		3	2	1	3	1		1
Morgan							2		2			
Perry												
Pickens							2		2			
Pike								1	1			
Randolph												
Russell												
St. Clair			5			1	2		2	2		2
Shelby							6	1	7			
Sumter								1	1	1		1
Talladega	1	1	2				2	1	3			
Tallapoosa												
Tuscaloosa					1	1	4	2	6			
Walker							15		15			
Washington												
Wilcox												
Winston							2		2			

Total includes reports not stating race.

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COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	PNEUMONIA			RHEUMATIC FEVER			RHEUMATIC HEART			ROCKY MT. SPOTTED FEVER		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	2296	979	4988	6	5	11	64	15	79	18	2	21
Autauga	1		1									
Baldwin	3	1	7									
Barbour												
Bibb							1		1			
Blount										1		2
Bullock												
Butler	2		2									
Calhoun	1		1				3		3	1		1
Chambers	137	181	319				1	1	2			
Cherokee	1		1				3		3			
Chilton	5	1	7									
Choctaw	1	2	3									
Clarke	1	1	2									
Clay							3		3			
Cleburne							1		1			
Coffee												
Colbert	6		21				2		2			
Conecuh	1	1	2					1	1			
Coosa							1		1			
Covington												
Crenshaw												
Cullman							1		1			
Dale							1		1			
Dallas		2	8				1	1	2			
DeKalb	1		1				4		4	1		1
Elmore				1		1	1		1			
Escambia	3		3									
Etowah	1		294				3		3			
Fayette		1	1									
Franklin	2		2									
Geneva												
Greene												
Hale												
Henry							1		1			
Houston	1		1				2		2			
Jackson												
Jefferson	1409	565	1991	2	3	5	14	6	20	3	1	4
Lamar							2		2			
Lauderdale	3		6				1		1	1		1
Lawrence												
Lee												
Limestone	19	6	61									
Lowndes		2	2									
Macon								1	1			
Madison	73	11	88	1	1	2	1		1			
Marengo	1		1				1		1			
Marion							1		1			
Marshall	111		374				3		3	2	1	3
Mobile	98	46	1194				2	1	3			
Monroe	4	1	5									
Montgomery	109	42	153	2	1	3	3	4	7			
Morgan	1		2							2		2
Perry												
Pickens							1		1			
Pike	1		1				2		2			
Randolph												
Russell							1		1			
St. Clair							1		1	1		1
Shelby	16	5	21							1		1
Sumter												
Talladega	106	108	230							2		2
Tallapoosa	1		1									
Tuscaloosa			1				2		2	1		1
Walker	7	1	8							2		2
Washington												
Wilcox	1	1	2									
Winston	169	1	171									

Total includes reports not stating race.

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COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	SALMONELLA			SCARLET FEVER *			SHIGELLOSIS			TETANUS		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	21	9	474	280	224	3535	14	4	121	3	2	5
Autauga												
Baldwin			8			209			2			
Barbour			1	2		1						
Bibb												
Blount												
Bullock			1									
Butler			1									
Calhoun			1									
Chambers												
Cherokee						1						
Chilton												
Choctaw												
Clarke			1									
Clay												
Cleburne						3						
Coffee			4						1			
Colbert			4	13	1	50						
Conecuh			2						1			
Coosa												
Covington			1									
Crenshaw			3						2			
Cullman	1		3	9		13						
Dale			9						1			
Dallas			30						14			
DeKalb												
Elmore			4	1		1			1			
Escambia	1		1	1		1						
Etowah			15						6			
Fayette	1		1						1			
Franklin				1		2						
Geneva												
Greene			1									
Hale				2	1	3						
Henry	1		1							1		1
Houston			8	6		6	3		7			
Jackson							2		2			
Jefferson	1	2	118	130	194	509			10			
Lamar												
Lauderdale			4	1		1						
Lawrence												
Lee			4									
Limestone				8	3	26			2	1		1
Lowndes												
Macon						13						
Madison			16	51	20	647		1	3			
Marengo												
Marion												
Marshall				2		3			1			
Mobile	4	2	111	1		1214	6	1	41		1	1
Monroe												
Montgomery	3	1	80		2	771		1	8		1	1
Morgan			6						2			
Perry								1	1			
Pickens	1		2		1	1						
Pike										1		1
Randolph												
Russell			1									
St. Clair			1	1		1						
Shelby				2		4						
Sumter												
Talladega	1	1	2						5			
Tallapoosa												
Tuscaloosa	7	3	27	3	2	8	3		9			
Walker				1		1			1			
Washington												
Wilcox			2									
Winston				46		46						

Total includes reports not stating race.

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COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	TYPHOID FEVER			UNDULANT FEVER			WHOOPING COUGH					
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	4	3	8	3		3	3	1	4			
Autauga												
Baldwin												
Barbour												
Bibb												
Blount												
Bullock												
Butler												
Calhoun												
Chambers												
Cherokee												
Chilton												
Choctaw												
Clarke												
Clay												
Cleburne												
Coffee												
Colbert												
Conecuh												
Coosa												
Covington								1	1			
Crenshaw												
Cullman												
Dale							1		1			
Dallas												
DeKalb												
Elmore												
Escambia		1	1									
Etowah			1	3		3						
Fayette												
Franklin												
Geneva												
Greene												
Hale												
Henry												
Houston												
Jackson	1		1				1		1			
Jefferson							1		1			
Lamar												
Lauderdale												
Lawrence												
Lee												
Limestone												
Lowndes												
Macon												
Madison												
Marengo												
Marion												
Marshall												
Mobile												
Monroe	1		1									
Montgomery		1	1									
Morgan		1	1									
Perry												
Pickens												
Pike												
Randolph												
Russell												
St. Clair	1		1									
Shelby												
Sumter												
Talladega												
Tallapoosa												
Tuscaloosa												
Walker												
Washington												
Wilcox												
Winston	1		1									

Total includes reports not stating race.

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DIVISION OF WOMEN, INFANTS AND CHILDREN (WIC)

The Special Supplemental Food Program for Women, Infants and Children (WIC) is designed to provide specific nutritious foods as supplements to the diets of pregnant and nursing women, infants and children up to 5 years of age. Participants must be determined by competent professionals (physicians, nutritionists, and nurses) to be at "nutritional risk" because of inadequate nutrition and inadequate income.

The purpose of WIC is to serve as an adjunct to good health care during the critical times of growth and development to improve health status and prevent the occurrence of health problems.

The WIC Program is funded with unmatched federal funds by the U.S. Department of Agriculture. In 1979 funds totaling $12,273,926 provided WIC benefits to 78,530 individuals with an average of 32,000 participants per month.

As funds became available, new programs were started in counties with the greatest need as determined by a formula of infant mortality and per capita income. In 1979, 21 counties began WIC Programs and by the end of the year programs were in 66 counties.

An orientation training program is provided by the WIC Division to new employees of the WIC Program. A total of four training programs, each consisting of eight hours, provided formal training to 68 new employees. The WIC Staff in local agencies includes 29 nutritionists, 49 nurses, and 87 clerical personnel.

Specified nutritious foods provided to eligible participants are milk, eggs, cheese, cereal fortified with iron, citrus juices and iron fortified infant formula. Vouchers issued to the participants are redeemable for the foods at any one of the 600 grocery stores which have contracts with the state. The average food provided was $26.90 per month for each individual.

The U.S. Department of Agriculture provided the Alabama WIC Division with additional funds of $33,698.00 to provide WIC benefits to migrant farmworkers. During the months of May-July, 281 migrants were certified as eligibles in Baldwin, Marshall, Jackson, DeKalb, Blount and St. Clair counties.

All participants receive nutrition education by nutritionists, nurses and trained clerical personnel in the local program areas. This education includes a discussion of the participant's nutritional needs; information on the use of the supplemental foods and their nutritional value; and an explanation of the importance of health care. Nutritionists also provide in-service education to local health department staff members. When appropriate, referrals are made to health department clinics and agencies in the community.

With the addition of one more county, the Alabama WIC Program will become statewide. The 22 new county programs will permit the number of participants to increase rapidly as anticipated funds became available.

BUREAU OF CLINICAL SERVICES

DIVISION OF CANCER CONTROL

Central Cancer Registry

The central cancer registry is now receiving as many, or more, cancer case reports in a single month as it received each year from 1958 through 1968. During the entire year of 1968, the central cancer registry received 5,949 cancer case reports, while in December of 1978 alone 8,130 reports were received.

Currently the registry is unable to provide current statistical information being requested by Alabama physicians, official county and district groups, as well as the universities and medical schools due to a shortage of personnel.

Tumor Clinic Assistance Service

During the past year, 134 new applications were received for tumor clinic assistance service and 70 were approved. A total of one-hundred and twenty-eight (128) individual Alabamians received direct patient care services through the five cooperating cancer clinics within the state.

TUMOR CLINIC APPLICATIONS

Received: 134
Approved: 70

INDIVIDUALS RECEIVING ASSISTANCE

New Cases: 65
Impatient Days: 651
Outpatient Visits: 499

Old Cases: 63
Inpatient Days: 89
Outpatient Visits: 152

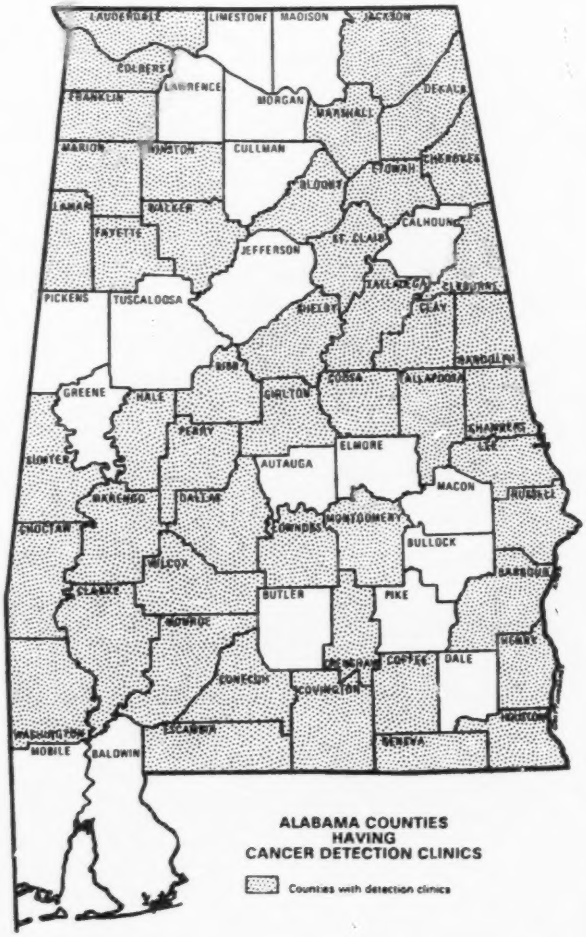
DIVISION OF CANCER DETECTION

Despite cutbacks mandated by the Governor, momentum previously generated by the Cancer Detection Division's management and implementation systems resulted in the screening of 19,488 women, an increase of 3,488 patients over last year. Patients recalled for repeat examinations numbered 12,514, an increase of approximately 2,200, while another 6,974 patients were examined for the very first time, an increase of approximately 1,300 over last year. The total number of examinations performed during calendar year 1979 was 22,576 (total of Pap and Gravlee tests combined).

The overall yield of abnormal tests to the number of patients examined continues to hover around five percent. A total of 115 new patients with abnormal pathology were found this year. Diligent follow-up efforts on such patients resulted in our detecting 65 patients with invasive cancer or carcinoma in-situ and 28 more with early precursors to cancer. Ninety-five percent of these were found in cancer's early curable stages; only five patients were beyond that. This is a record maintained from the beginning. Based on federal government estimates that each early cancer found saves $24,000, this represents a gross savings for Alabama citizens and government of $2,112,000. Contrasted with $365,000, the total cost for operating this Division, this is a 579% return on our investment.

We expanded our cancer search into two new counties, Jackson and Marshall, this year where more than 2,100 patients were examined. Nine patients with previously unknown cancers and early precursors have already been found. Eight others in these two counties were discovered late in the year and continue under the scrutiny of their private physicians prior to diagnostic and/or treatment stages.

Within the 48 counties operational with cancer detection activities, there remain seventy-four patients in this open status prior to diagnosis and/or treatment.


LAUDERDALE
LIMESTONE
MADISON
JACKSON
COLBERT
LAWRENCE
MORGAN
MARSHALL
DEKALB
FRANKLIN
MARION
WINSTON
CULLMAN
ETOWAH
CHEROKEE
BLOUNT
LAMAR
WALKER
FAYETTE
CALHOUN
ST. CLAIR
JEFFERSON
TALLADEGA
CLEBURNE
PICKENS
TUSCALOOSA
SHELBY
CLAY
RANDOLPH
BIBB
GREENE
HALE
CHILTON
COOSA
TALLAPOOSA
PERRY
CHAMBERS
LEE
SUMTER
ELMORE
AUTAUGA
MACON
RUSSELL
MARENGO
DALLAS
MONTGOMERY
LOWNDES
CHOCTAW
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE
MONROE
HENRY
CRENSHAW
COFFEE
DALE
CONECUH
COVINGTON
WASHINGTON
ESCAMBIA
HOUSTON
GENEVA
MOBILE
BALDWIN
Counties with detection clinics

ALABAMA COUNTIES
HAVING
CANCER DETECTION CLINICS

Next year already appears to be taking on a different responsive transitional profile. Mandated funding cutbacks have required operational adjustments resulting in our providing fewer Gravlee tests than during the same period last year and a significant decrease in the number of abnormal tests. Between October and December, 1978, we performed 541 Gravlee tests with 10 abnormal results; but during the same period in 1979, we performed only 350 Gravlee procedures yielding only two with abnormal results.

Normal inflation's bite into our operating funds is already having a negative result on our effectiveness. Additional finding, therefore, is essential just to maintain the gains we have made in our efforts to find early, curable cancer. Planned and needed expansion into Mobile and Baldwin counties with our program will require still more funds. Cost-effectiveness and cost-benefit have continually been demonstrated since the inception of the Cancer Detection Division. Unserved areas of the state of Alabama deserve the same considerations as those fortunate areas already being served, but the anxiety and despair of cancer cannot be averted without adequate funding.

DIVISION OF HYPERTENSION

In spite of being the division with the lowest state budget in the Bureau of Clinical Services, the Alabama High Blood Pressure Control Program continued to address the task of high blood pressure prevention and control.

Since sufficient money was not allocated for much needed expansion, the program opted to search for additional satellite service points within existing counties. This effort increased our number of clinic locations from eleven to fourteen.

During 1979 the program screened 13,440 new people and brought the five-year cumulative total to 44,621. The feature that distinguished this program from many others is the commitment to provide therapy for those in need and to refer and follow those who can afford care either by their own means or some third party program. Were this a program to screen only, there is little question that screenings would have numbered in several hundred thousands.

In 1979 the program found 3,219 people who were elevated on successive occasions or who had a history of high blood pressure. Of this number, a total of 641 were entered into program therapy, either by full-care or joint-care arrangements. The remaining 2,578 or 80% were referred to or went back to private care and entered into a follow-up system.

By the end of 1979 a total of 1,756 hypertensives were on program therapy. The cost for maintaining these patients on program medication for the year averaged $30 each. This program expenditure relates very favorably to a study conducted by the National High Blood Pressure Education Program. That study estimated the mean annual drug cost per person to be $131 for trade-name sales and $80 for generic sales. Based upon more recent trends they concluded that the mean annual cost would be $127 per person.

During 1979 the 588 full-care patients returned for 4,751 visits, and the 1,168 joint-care patients returned for 7,825 visits. In total the program experienced 12,576 return visits for an average visit per patient of 7.2 times per year. This type of clinic activity is testimony to the responsiveness between staff and patients.

Costs during 1979 to provide services to all patients, to refer and follow up others, and to provide educational awareness statewide, averaged only $177 per patient. A study has reported that the mean cost for just providing services to hypertensive patients in the initial year is $327 with subsequent year means of $220. It is therefore concluded that the Alabama program delivers services to high-risk, low-income patients at a lower cost than conventional delivery systems.

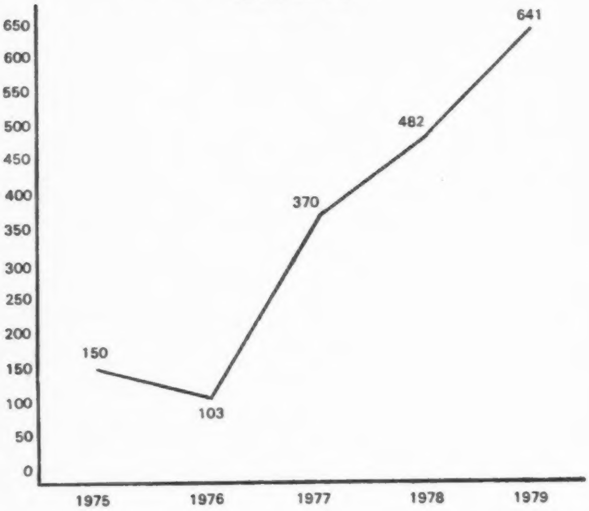
The program has been very effective in controlling patients' high blood pressure. In April of 1979, the program began to compile control data in the central office for full-care patients. From April to December 2,447 patient visits yielded controlled blood pressure out of 3,602 visits for 68%. Patients screened in 1979 who were under medical care from other sources had a control rate of 57%.

As this report has indicated, costs per patient per year includes the many other activities and services performed around the state of Alabama. The High Blood Pressure Control Office serves as a clearinghouse for high blood pressure materials; during 1979, more than 28,000 pieces of literature were distributed. Three new educational pieces were designed and produced during 1979 to better inform the public concerning the danger of uncontrolled blood pressure. One of those publications was designed for industry and work-setting programs, a national priority area for prospective programs. Additional commitment to blood pressure control in the work-setting was manifest by the program serving on a planning committee for a southeast regional worksite conference to be held in Birmingham in 1980 and another statewide conference in May of 1980. Other examples of worksite emphasis were several screenings conducted among various Alabama industries and screenings for Public Safety personnel in Montgomery and at several district headquarters.

During May, which is National High Blood Pressure Month, the program co-sponsored statewide conference and participated in several health fairs and television programs.

Late in 1979 in response to national goals and state needs, the program began some advance planning for future high-risk target areas of service to maximize effectiveness and to stretch dollars. Congress is committed and convinced that programs such as ours are well worth the expenditure because of past results and because they are prevention-oriented. Congress is likewise convinced that state health departments should provide the leadership to coordinate and maximize services among all health care delivery systems.

The challenge for Alabama is to be able to secure those earmarked pervention dollars, to expend them wisely, to be allowed to hire and train personnel.


NUMBER OF NEW HYPERTENSIVES BROUGHT ON PREVENTIVE THERAPY BY YEAR 1975-1979

First Things First
Welcome to Patient Appreciation Day
HIGH BLOOD PRESSURE CAN BE TREATED!

TIME/PROGRESS CHART FOR TARGET HYPERTENSIVE POPULATIONS 12/31/79

County	Days of the Week in Operation	Months in Operation	Population Over 18 Years	Number Screened Over 18 Years	Percent Over 18 Years Screened	Estimated Hypertensives Below Poverty	Number Below Poverty Reached and on Full Care	Percent Below Poverty Reached and on Full Care	Total on Program Therapy	Percent below Poverty Reached and on Program Therapy
Chambers	5	61	23,776	12,055	50.7	707	183	26.0	267	37.8
Dallas	5	41	33,122	5,127	15.5	1,564	120	7.6	521	33.3
Calhoun	5	38	68,040	8,699	12.8	1,694	135	8.0	358	21.1
Coffee	2.5	37	22,318	3,679	16.5	666	11	1.6	196	29.4
Gevena	2.5	37	14,645	3,764	25.7	557	9	1.6	102	18.3
Randolph	2	33	12,336	1,602	13.0	506	41	8.1	133	26.3
Bibb	5	25	8,362	4,979	59.5	385	46	11.9	100	26.0
DeKalb	5	23	28,169	4,716	16.7	1,242	43	3.5	79	6.4
TOTALS			210,768	44,621	21.2	7,321	588	8.0	1,756	24.0

DIVISION OF IMMUNIZATION

Two separate programs are housed within the state office of the Division of Immunization: the Immunization Program and the Influenza Program.

Immunization Program

1979 was a year of significant progress for the Alabama Immunization Program. The legislature amended the existing compulsory school entry immunization law so that every child in grades K-12 must be completely immunized. Many children received needed vaccines during the school-based immunization initiative in 1978, but many will need additional vaccines to qualify for a certificate. The biggest obstacle to bringing children into compliance with the new law is that no money was appropriated with the bill. It is estimated that a minimum of $200,000 will be necessary to purchase an adequate supply of vaccine for school children immunized by the health department. Please see Table I for a detailed picture of our needs. During 1979 plans were made at the state level to help local health and education officials develop a compliance schedule for their county. Many counties set deadlines (by grade or by school) for compliance and a few special clinics were held. Table II shows the number of doses of each vaccine administered by public health during 1979.

With the close of the old state laboratory building on Monroe Street, the Immunization Program lost the use of the large refrigerator and freezers for vaccine storage. A new system for vaccine receipt, storage and distribution was initiated during 1979. The central office of the Immunization Programs remained responsible for calculating statewide needs and ordering vaccine. A refrigerator and freezer were set up in each of the six health service areas. Vaccine is now distributed to local health departments from these six storage areas by the Immunization Program representatives. The new system was designed not only to facilitate vaccine distribution but to eliminate much of the vaccine wastage caused by shipping.

During 1979 the U.S. Public Health Service Advisory Committee on Immunization Practices changed its recommendations on rubella immunization. The immunizations are now advised for post-pubertal females provided they are not pregnant and they agree to delay pregnancy for 3 months. Accordingly, the Jefferson County Health Department and the UAB School of Nursing held a special rubella screening and immunization clinic for female student nurses. Health departments have been encouraged to include rubella immunization for post-pubertal females in their routine clinics.

To apprise health departments and physicians of the changes in recommendations which have occurred in the last few years, the 1975 edition of *Recommendations for Immunization Practices and Tuberculin Testing in County Health Departments* was revised and updated. During 1979 it was distributed to all local health departments, public health representatives and to a limited number of physicians.

The Immunization Program has several means of monitoring immunization levels and disease activity within the state. Annual surveys of school entry levels, two-year-old levels, and day care center levels are conducted. Results of the three surveys for 1979 are shown in Tables III, IV and V.

Outbreak control programs for vaccine-preventable diseases are most effective when performed during the first generation of cases. After this time, morbidity increases, and the benefit of immunization to the largest number of susceptibles decreases.

During the 1977 and 1978 school years several outbreaks of measles occurred, but were not brought to the attention of health officials until several generations of the disease had elapsed.

To prevent the reoccurence of situations like this, the Immunization Division set up the Statewide Operation Surveillance System (S.O.S.). This system serves as an early warning device for the detection of vaccine-preventable disease and other diseases of epidemiological importance. Hospitals, private physicians and schools are used as sensors of disease activity. These sites are monitored weekly by local health departments, and any information gathered is telephoned to the central office of the Immunization Program. The program is currently operational in thirty counties and has been instrumental in the detection of several outbreaks of vaccine-preventable disease.

Two measles outbreaks, one detected through S.O.S. and the other reported by an adjacent state, were investigated during 1979. Outbreak control programs were conducted in Calhoun and Cleburne counties and in Jackson County. Work was performed in cooperation with the Division of Epidemiology.

From time to time during the year, Immunization Program manpower support was given to the Division of Epide-

miology for investigation and control of diseases other than those preventable by vaccines (i.e., histoplasmosis, hepatitis).

The high-risk program was continued during 1979. "Tickler" files were set up in most health departments to monitor progress of high-risk children through the services of immunization and to identify quickly those children who have become delinquent.

TABLE I
IMMUNIZATION PROGRAM
SCHOOL ENTRANCE IMMUNIZATION SURVEY

	1979				(For Comparison) 1978	
County	Enrollment	# with IMM-50*	% with IMM-50*	Ranking	% with IMM-50*	Ranking
Autauga	1,045	1,020	97.61	37	95.54	50
Baldwin	2,001	1,990	99.45	9	98.37	18
Barbour	639	635	99.37	10	97.55	29
Bibb	560	550	98.21	27	99.63	4
Blount	875	850	97.16	42	98.24	19
Bullock	488	483	99.59	8	97.65	25
Butler	837	826	98.69	25	99.49	5
Calhoun	2,878	2,764	96.04	53	97.29	33
Chambers	1,649	1,609	97.57	38	93.07	60
Cherokee	532	505	94.92	60	93.18	59
Chilton	933	933	100.00	1	99.78	3
Choctaw	665	665	100.00	1	99.12	9
Clarke	1,183	1,158	97.89	34	98.87	10
Clay	504	488	96.83	46	96.17	44
Cleburne	356	352	98.88	21	98.17	20
Coffee	1,490	1,486	99.73	6	99.93	2
Colbert	1,371	1,316	95.99	54	93.74	58
Conecuh	548	520	94.89	61	97.37	32
Coosa	307	305	99.35	11	97.90	24
Covington	1,175	1,161	98.81	22	97.57	28
Crenshaw	404	400	99.01	18	99.25	7
Cullman	1,789	1,737	97.09	44	98.46	15
Dale	1,593	1,563	98.12	30	95.85	47
Dallas	2,045	2,005	98.04	31	97.58	27
DeKalb	1,171	1,036	88.47	67	95.81	48
Elmore	1,464	1,361	92.96	64	95.70	49
Escambia	1,505	1,444	95.95	56	90.84	66
Etowah	3,492	3,365	96.36	51	96.21	43
Fayette	531	530	99.81	5	100.00	1
Franklin	740	735	99.32	12	94.25	55
Geneva	682	680	99.71	7	97.18	36
Greene	596	576	96.64	47	91.07	65
Hale	584	584	100.00	1	98.68	13
Henry	661	648	98.03	32	97.61	26
Houston	2,963	2,932	98.95	19	98.47	14
Jackson	1,731	1,689	97.57	38	95.17	52
Jefferson	21,785	20,701	95.02	58	92.27	62
Lamar	594	579	97.47	41	96.83	40
Lauderdale	1,985	1,933	96.62	48	98.79	11
Lawrence	1,111	1,057	95.14	57	97.49	31
Lee	2,371	2,251	94.94	59	96.96	38
Limestone	1,388	1,360	97.98	33	94.86	53
Lowndes	450	427	94.89	61	90.08	67
Macon	1,253	1,208	96.41	50	96.84	39
Madison	5,578	5,474	98.14	28	98.04	22
Marengo	902	902	100.00	1	99.40	6
Marion	970	958	98.76	23	96.96	37
Marshall	1,848	1,828	98.92	20	97.19	35
Mobile	13,705	13,502	98.52	26	97.54	30
Monroe	1,168	1,121	95.98	55	94.70	54
Montgomery	6,480	6,236	96.23	52	98.12	21
Morgan	2,509	2,357	93.94	63	93.91	56
Perry	521	517	99.23	14	98.02	23
Pickens	715	710	99.30	13	99.18	8
Pike	1,110	1,014	91.35	65	93.83	57
Randolph	641	629	98.13	29	96.30	41
Russell	1,627	1,606	98.71	24	96.05	45
St. Clair	1,252	1,224	97.76	35	95.48	51
Shelby	1,764	1,712	97.05	45	96.25	42
Sumter	473	457	96.62	48	91.40	63
Talladega	2,450	2,210	90.20	66	91.11	64
Tallapoosa	1,466	1,429	97.48	40	97.28	34
Tuscaloosa	4,146	4,050	97.68	36	98.42	16
Walker	1,835	1,817	99.02	17	98.69	12
Washington	648	643	99.23	14	98.38	17
Wilcox	640	635	99.22	16	93.04	61
Winston	630	612	97.14	42	95.91	46
State Total	126,002	122,060	96.87		96.15	

*IMM-50 - Certificate of Immunization (At least 3 DTP injections, 3 polio doses, 1 measles, 1 rubella, and 1 mumps).

During 1979 the Immunization Program cooperated with MCH in developing a pilot project (funded by HEW) to track the immunizations of pre-school children in rural Alabama.

Health education and information activities are vital to the success of the Immunization Program. The joint project with the Adult Basic Education Section of the State Department of Education was carried out again in 1979. Through this project, immunization information is provided to adults with low education levels. These adult learners are often in the "high-risk" group and many live in rural areas. Another project with the Community Education Section was begun in 1979. This project will provide health education to adults who use the classroom during the evenings and will expand their scope of knowledge.

The Alabama Task Force on Immunization Activities has historically been the statewide planning and coordinating body for immunization education as well as the major resource for volunteer participation. During 1979 a representative from the Governor's Commission on the Year of the Child joined the task force, providing a direct line of communication to and from the Governor's office.

The North Alabama Task Force drafted a resolution asking that the state provide enough money to buy vaccine for implementation of the new school law.

Most informational materials developed by the Immunization Program were directly related to the new law. A new "Certificate of Temporary Exemption" and a new "Certificate of Medical Exemption" were created to help students whose special circumstances prevent them from complying with the law. News releases were sent to local health departments to be "localized" (clinic dates, times, etc.) and sent to the media.

During 1979 the Division of Epidemiology developed a newsletter "Communicable Disease Report" (CDR). The Immunization Program information specialist serves as editor.

TABLE II
IMMUNIZATION PROGRAM
TWO-YEAR-OLD IMMUNIZATION LEVELS—October 1979-March 1980

	% Immunized for:					% Totally Protected[4]	(For Comparison) 1978 - 79 % Totally Protected[4]
	DTP[1]	Polio[2]	Measles[3]	Rubella[3]	Mumps[3]		
HSA 1 (Colbert, Cullman, Franklin, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marion, Marshall, Morgan, & Winston Cos.)	91.1	84.7	83.9	82.3	79.8	71.8	76.7
Tri-County Health District* (Cullman, Lawrence, Limestone, Morgan Cos.)	94.0	81.0	85.3	83.6	82.8	69.8	84.6
Northwest Al. Health Dist.* (Colbert, Franklin & Lauderdale Counties)	89.2	75.7	82.0	80.2	81.1	68.5	73.3
Madison County*	91.4	85.3	91.4	90.5	87.1	77.6	88.3
HSA 2 (Bibb, Fayette, Greene, Hale, Lamar, Pickens, & Tuscaloosa Counties)	80.8	68.8	76.0	74.4	74.4	61.6	75.9
Tuscaloosa County*	80.8	70.8	77.5	76.7	73.3	60.9	76.9
HSA 3 (Blount, Chilton, Jefferson, St. Clair, Shelby & Walker Cos.)	90.9	81.1	84.1	82.6	81.8	73.5	76.5
Jefferson County*	92.4	83.3	87.1	84.8	82.6	72.7	75.9
HSA 4 (Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, DeKalb, Etowah, Randolph, Talladega, & Tallapoosa Cos.)	82.5	68.6	75.2	76.6	74.5	60.6	78.6
HSA 5 (Autauga, Barbour, Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Elmore, Geneva, Henry, Houston, Lee, Lowndes, Macon, Montgomery, Pike & Russell Cos.)	80.8	71.5	83.9	83.1	80.8	62.3	75.9
Montgomery County*	76.8	61.6	81.6	79.2	76.8	52.8	73.6
HSA 6 (Baldwin, Choctaw, Clarke, Conecuh, Dallas, Escambia, Marengo, Mobile, Monroe, Perry, Sumter, Washington, & Wilcox Counties)	78.0	68.2	81.8	78.8	78.0	68.2	71.3
Mobile Co.*	84.2	73.3	81.7	80.8	79.2	66.7	60.5
STATE - 1979 - 80	84.3	74.7	81.9	80.3	79.1	67.5	
(For Comparison) - 1978 - 79	89.9	86.2	87.2	87.0	82.4	75.6	

1 - 3 or more injections
2 - 3 or more doses
3 - 1 injection
4 - 3 DTP, 3 Polio, 1 Measles, 1 Rubella, 1 Mumps

*Separate surveys were conducted in these metropolitan areas.

TABLE III
1979 DAY CARE CENTER ENROLLEES % IMMUNIZED FOR

	DTP	POLIO	MEASLES	RUBELLA	MUMPS
HSA 1	93.7	92.8	94.4	94.5	92.5
HSA 2	80.7	79.9	80.5	80.5	78.1
HSA 3	95.0	95.2	97.4	97.4	97.2
HSA 4	93.9	92.1	93.4	93.2	91.3
HSA 5	95.1	94.8	95.4	95.1	93.7
HSA 6	96.1	95.5	96.0	96.0	94.8
State	92.8	92.2	93.3	93.2	91.7

Influenza Program

The Alabama Influenza Program, now in its second year of operation, has made notable progress in its effort to provide influenza immunization to the state's 692,000 high-risk individuals. Even though the expected level of influenza immunization has not been attained, the program has experienced slightly more than a 300 percent increase in the number of doses of vaccine administered this year over last.

There has been increased interest in influenza immunization from both the public and private medical communities. More than 22,500 doses of vaccine were supplied to the state's private health care providers during the 1979-80 flu campaign. Many counties scheduled special influenza immunization clinics and utilized the services of the Influenza Program's team of Ped-O-Jet technicians.

Promotional efforts were also stepped up for the 1979-80 campaign. Letters stating the availability of influenza vaccine from the Influenza Program were sent to every physician, nursing home and hospital in the state. Radio spots were prepared and distributed to all of Alabama's 114 radio stations. A public service announcement, the first ever produced by the Immunization Division, was also made and distributed to 16 of the state's 17 television stations. The announcement featured Paul "Bear" Bryant and stressed the importance of influenza immunization for the elderly and the chronically ill. The spot and a related article in *Alabama's Health* received recognition by a communication organization in Montgomery. This television spot was also used by the Mississippi Department of Public Health.

During the program's first year only 10,197 doses of vaccine were administered. During the second year, the 1979-80 flu season, 32,500 doses were administered. It is expected that this rate of growth will continue in the years to come.

It is projected that the funds needed to purchase public health vaccine in support of the amended school immunization law is approximately $286,000. This figure was arrived at as follows:

	School-age Unprotected		Cost per Dose		Total Cost
Polio	56,052	x	.332	=	$18,609
Td	53,683	x	.125	=	6,710
Measles	106,578	x	1.12	=	119,367
Rubella	187,104	x	.94	=	175,878
Mumps	97,105	x	1.60	=	155,368
TOTAL					$475,932
Percent of children needing public health assistance					x.60
					$285,559

TOTAL VACCINES ADMINISTERED 1979

Diphtheria	209,279
Tetanus	211,535
Pertussis	56,234
Measles	76,443
Mumps	94,335
Rubella	58,942
Polio	167,334
Other (Flu, ISG, etc.)	14,611

DIVISION OF TUBERCULOSIS

There were 644 new cases of tuberculosis reported in Alabama during calendar year 1979. The total cases reported represent an approximate four percent decrease compared to the 672 cases during 1978. New tuberculosis case rates per 100,000 population in the state decreased from 18.0 in 1978 to 17.0 in 1979. In addition to the new cases, there were 54 reactivation cases reported during the year. These cases were not counted as new cases because they had been reported in prior years. Most of the reactivations were due to patients receiving inadequate treatment in the past.

There were 64 extrapulmonary cases representing ten percent of the total cases reported during the year. In Alabama and the United States, the number of extrapulmonary cases reported each year remains almost constant. Therefore, the recorded reduction in tuberculosis incidence results mainly from decreases in the number of pulmonary cases reported.

Alabama continues to have one of the highest tuberculosis case rates in the nation. Based on the latest information available from the Center for Disease Control in Atlanta, Alabama ranked tenth in the nation in new tuberculosis case rates. Birmingham, among 57 cities with over 250,000 population, ranked fifth in the nation with a 43.2 tuberculosis case rate per 100,000 population. Mobile and Montgomery counties, among 97 city-county areas with 100,000 to 250,000 population, ranked 53rd and 24th in the nation respectively.

Much progress has been made in Alabama in recent years relative to reducing tuberculosis case rates per 100,000 population. Provisional figures in 1979 for Georgia, Florida, Mississippi, Tennessee and South Carolina indicate that Alabama will probably achieve a lower tuberculosis case rate than other states in this region having similar socio-economic conditions, population and race ratios.

Relative to race, the total number of new cases reported is about evenly divided between black and white; however, case rates among blacks per 100,000 population continue to be at least three times greater than that for the white population, 35.1 and 10.9 respectively. Although blacks account for only 25 percent of the state's population, they represented over half of the new tuberculosis cases reported in 1979. As in the past, males continue to comprise approximately two-thirds of the total new tuberculosis cases reported. Persons 45 years of age and older represent approximately 70 percent of the cases reported during the year. Case rates in 1979 by race and sex per 100,000 population are as follows: black male, 49.1; black female, 22.8; white male, 14.7; white female, 7.2.

There were 10 cases reported among children under five years of age during the year. These included seven blacks, two whites and one Vietnamese infant. Tuberculosis in infants is always a serious problem due to the possibility of tuberculous meningitis. Two meningitis cases in this age group were reported in 1979. Both of these were placed on appropriate treatment and are doing well.

Case rates per 100,000 population ranged from highs of 43.0 and 31.4 in Limestone and Tuscaloosa counties, to no cases being reported in Clay, Coosa, Lamar and Randolph counties. In 1977 Lamar County, a predominantly rural county in northwest Alabama near the Mississippi border, had the highest tuberculosis case rate in the state due to a community outbreak. As a result of effective case finding, case holding and prevention activities during and after the outbreak, Lamar County had no cases reported during the calendar year. Jefferson County, with nearly 20 percent of the state's population, reported almost one-fourth of the state's new cases in 1979.

ALABAMA TUBERCULOSIS CASES AND CASE RATES, DEATHS AND DEATH RATES AND RANK IN THE U. S.

Year	Cases	Rate	Rank	Deaths	Rate	Rank
1960	1,302	39.8	–	285	8.7	–
1961	1,313	39.5	10	273	8.3	4
1962	1,164	35.1	12	264	8.0	4
1963	1,326	39.3	7	256	7.7	5
1964	1,259	36.7	8	236	7.1	2
1965	1,417	40.6	3	248	7.4	2
1966	1,214	34.6	7	232	6.6	1
1967	1,379	38.9	3	226	6.3	1
1968	1,338	37.5	3	198	5.5	2
1969	1,203	33.0	3	198	5.4	2
1970	1,166	33.8	3	167	4.8	1
1971	985	28.4	3	147	4.2	1
1972	918	26.3	3	132	3.8	3
1973	790	22.6	5	104	3.0	3
1974	785	22.3	4	80	2.3	6
1975	780	22.1	7	95	2.7	7
1976	824	23.2	3	102	2.9	2
1977	704	19.7	9	76	2.1	4
1978	672	18.0	10	79	2.1	*
1979	644	17.0	9	47	1.2	*

*Rank not available at this time

At the end of the calendar year, prevalence reports indicated that there were nearly 1,500 diagnosed tuberculosis cases listed as receiving medical supervision by county health departments, private physicians and/or hospitals. By adhering to the contract hospital admission guidelines, the program was able to manage entirely on an outpatient basis approximately half of the new cases reported. All cases completing 18 to 24 months of multiple drug therapy continue to be recommended for closing to medical supervision. Although private physicians and hospitals are involved in the initial diagnosis and reporting of approximately two-thirds of the new cases, most of the patients are subsequently referred to the county health department clinics for long-term treatment, contact identification, investigtion and preventive treatment. Consequently, nearly 95 percent of the known cases, contacts and suspects in the state receive their medical supervision through the county health department clinics and contract hospitals. With the continued shift of emphasis from inpatient to outpatient care, the burden is much greater on the county health department outpatient treatment program. On the average, tuberculosis information indicates that 98 percent of the tuberculosis patient's total treatment is received on an outpatient basis compared to only two percent of patients being treated in the hospital.

Patients who have been discharged from medical supervision are not recommended for further follow-up. Close contacts and other high-risk groups who have completed INH preventive therapy are also recommended for discharge from surveillance and medical supervision. Reactivation rates are extremely low among persons completing treatment; therefore it is unproductive from a cost-benefit standpoint to have patients return to clinics for periodic follow-ups. Program evaluation reports for 1979 indicate that 98 percent of the new TB cases completed 12 months and 95 percent completed 24 months of therapy. Current records also indicate that 98 percent of all identified contacts received appropriate examinations, and 83 percent of the close contacts completed a recommended course of preventive therapy.

County health departments reported 221,226 tuberculin tests performed in 1979. Of this total, 85 percent were read, with 5,977 having results 10mm or greater for an overall reactor rate of 3.20 percent. Positive skin test rates ranged from a low of .5 percent (5 per 1,000) among persons (including contacts) 0-4 years of age to 9 percent (90 per 1,000) for persons 65 years of age or older. Positive tuberculin reactor rates among blacks continue to be twice as great as whites. When applying Alabama's tuberculin positive skin test rates by age group and race to the total population in the state, the infected population numbers nearly 220,000 individuals. The estimated number of infected persons ranges from a low of nearly 10,000 in persons under 14 years of age to a high of 77,620 for persons in the 45-64 year old age bracket.

As in the past, school employees are the only individuals required by law to have an annual examination for tuberculosis. Although the school employee tuberculin testing and preventive treatment program has its weaknesses, it has assisted in preventing tuberculosis outbreaks in the school systems. It has been several years since there has been a mini-tuberculosis outbreak in a city or county school. In an effort to improve this phase of the tuberculosis program, a committee was appointed to study the school employee program and existing law. The committee was charged with the responsibility of studying existing data concerning school employee examinations for tuberculosis and making new recommendations in this regard. Recommendations have been approved by the Area Tuberculosis Physician Coordinators and are currently under advisement by the State Committee of Public Health. If implemented, the basic change in the policy for examination of school employees would require an examination initially for teachers, bus drivers, janitors, food handlers and others who are in contact with children. No subsequent examinations would be required unless it was deemed necessary by the county health officer, state health officer, and/or the Tuberculosis Control Program.

The State Tuberculosis Program continues to stress that low priority be placed on the examination of food handlers and similar groups for tuberculosis in connection with job requirements. Most of the county health departments involved in this activity are performing the work primarily as a result of tradition rather than local ordinances, regulations and productiveness in finding new cases. The TB Control Program continues to discourage this activity except where absolutely mandated.

The Tuberculosis Control Division continued contracts with seven general hospitals for the care of inpatients during 1979. The contract hospitals recorded 358 patient admissions, 357 discharges and 6,645 patient days during the year. The average hospital patient stay was reduced from 21 days in 1978 to 18.6 days in 1979. The average contract hospital cost was approximately $150 per patient day in 1979. The state tuberculosis budget cost was approximately $100 per patient day with third party insurance paying the difference. The average cost per patient hospitalized in 1979 was approximately $2,800.

The contract for recalcitrant patients was renegotiated with the Board of Corrections in 1979. The contract provides for one bed as needed for male patients at Kilby Correctional Facility and one bed at the Julia Tutwiler Facility for females. The court order program is only utilized for the extemely difficult, non-motivated, and non-complying tuberculosis patient. The Board of Corrections' bed is used as a last resort measure when it is determined by the court that the patient is infectious and a definite public health hazard to his family and community. The patient is kept for a minimum of six weeks; failure to report to the county health department outpatient clinic as recommended after discharge will result in the patient being rehospitalized at the corrections facility. Patients admitted under the recalcitrant program remain under court order until completion of two years of multiple drug therapy. The contract serves primarily as a deterrent as only five patients were admitted under the court order program during the year. The five patients had a cumulative total of 2,468 days with an average stay of 49.2 days.

The contract hospital program cost the state $750,000 in 1979 compared to nearly $5,000,000 in 1967 when the district tuberculosis hospitals were in existence. This is a tremendous savings to the state of over $4,000,000 per year. It is even more remarkable when you consider inflationary trends—that a dollar in 1967 is worth only 35 cents in buying power today.

A new peer review system to evaluate the utilization and quality of inpatient care in the contract hospitals was implemented in 1979. The new system has proved to be more economical and equally effective compared to the system previously utilized. Peer review results of the seven contract hospitals in 1979 indicated that approximately 98 percent of the cases reviewed met the admission, treatment and discharge criteria established by the Tuberculosis Control Program.

The preventive therapy program continues with increased emphasis placed on close contacts and other persons at high risk of developing tuberculosis. During 1979, 5,079 persons were placed on isoniazid preventive therapy bringing the total to 110,716 started on the program since 1965. Blacks accounted for 54 percent of all persons placed on preventive therapy in 1979 and 47 percent of all persons placed on the program since its inception in 1965.

The preventive therapy program has been extremely effective in Alabama, and it is felt that this activity has been a major factor in the continued reduction of new cases and case rates. Today tuberculosis is both a preventable and curable disease. Preventing a case through examination and INH preventive therapy is estimated to cost the state approximately $156. This is a minimal cost compared to the $4,500 it costs to hospitalize a case for three weeks followed by a two year outpatient treatment program. This latter figure does not take into consideration the future cost resulting from the spread of infection by the case to other individuals.

The Area Tuberculosis Physician Coordinator concept was continued in 1979. There are nine such consultant physicians who are responsible for coordinating in-patient and outpatient activities in all 67 counties of the state. In addition to the coordinators, there are 20 other physicians who hold county health department out-patient clinics on a fee-for-service basis.

The Tuberculosis Division and the State Tuberculosis Laboratory continue to participate in a primary drug resistance study with the Center for Disease Control in Atlanta. The study began in November, 1976, and through 1979 a total of 759 cultures have been submitted to the Center for Disease Control.

Results of the study indicate that approximately 3.9 percent of the specimens submitted had some form of primary drug resistance to the anti-tuberculosis drugs. Eighteen areas in the United States, including Alabama, are currently participating in the study. The drug resistance percentage for each area ranges from a low of 3.0 percent in one location to a high of nearly 16.3 percent in another region located near the Mexican border. Alabama's drug resistance percentage of 3.9 percent ranks it fourth among the lowest of all areas participating in the study. Nationally, the Center for Disease Control is recommending that additional emphasis be placed on monitoring drug resistance since the publicized community drug resistant outbreak in Mississippi. The Tuberculosis Program in Alabama has developed a system to monitor drug resistance by county and on a statewide basis. This system will enable us to detect emerging drug resistant patterns as they occur.

The Tuberculosis Division is currently participating with CDC in another study which is designed to determine the infectiousness of patients with drug resistant organisms as compared to patients who are sensitive to all drugs. The results of this study should be available in 1980.

At the request of the Center for Disease Control, the Tuberculosis Program participated in the orientation of two foreign physicians who were visiting the United States. One of these was Dr. Joseph Kumuyi who is the Tuberculosis Control Officer from Nigeria. The other was Dr. Ma Chao-I who is Chief, Communicable Disease Control in Taiwan. Each of the visitors spent two weeks observing the Tuberculosis Division central office operation, hospitalization program and out-patient clinics. Both physicians appeared to be extremely impressed with the Alabama Tuberculosis Prevention and Control Program. Dr. Kumuyi and Dr. Ma were particularly interested in learning the control techniques utilized in Alabama to determine if they could be adapted in their countries because tuberculosis is a leading cause of death in both Nigeria and Taiwan.

A total of approximately 135 nurses, physicians and other interested individuals attended the Eleventh Annual Tuberculosis Conference in Birmingham. The general session was planned by the Tuberculosis Division and the clinical session was sponsored by the Alabama Thoracic Society. The conference was approved for physician continuing medical education credit. In addition, numerous in-service tuberculosis programs were conducted at hospitals, health departments, and other facilities by the Tuberculosis Division office and field staff. The annual conference, in-service programs and other scheduled workshops provided persons attending with the latest information available concerning the modern management of tuberculosis.

Activities of the Program Nurses

The Tuberculosis Program nurses continue to assist the county health departments in their tuberculosis work. They serve as coordinators of the tuberculosis program in the county health departments. They also serve as consultants in tuberculosis to private physicians and other health agencies.

The Tuberculosis Program nurses made 2,764 visits to the county health departments in connection with priority tuberculosis control acitivities. They provided nursing services in a total of 937 tuberculosis outpatient and regular chest clinics.

They collected 9,197 sputum specimens by the aerosol induction technique and administered 37,108 Mantoux tuberculin skin tests.

The nurses made 1,367 home visits to tuberculosis patients and their families, and performed 1,084 other visits to nursing homes, schools, factories and private physicians in connection with tuberculosis control activities.

The Tuberculosis Program nurses conducted a total of 47 in-service programs with 695 persons attending.

At the end of the year, there were three vacant nurse positions in the Tuberculosis Program. The tuberculosis nursing supervisor held seven in-service programs throughout the state and conducted a tuberculosis nurses' workshop for all Tuberculosis Program nurses.

Activities of the Field Representatives

The priorities for field investigators are cases at home, contacts to new cases, suspects and high risk tuberculin reactors.

During calendar year 1979, there were 6,637 cases, contacts, suspects, and reactors brought or returned to medical supervision by the investigators. Only 40 or .6 percent of these persons were dispositioned as unable to locate.

The following types of referrals were dispositioned:

3,107 cases
1,238 contacts to new cases
294 suspects
1,998 reactors

Visits were made to 226 private physicians to obtain current x-ray, sputum and treatment status on delinquent patients. There were 299 hospital visits made in connection with tuberculosis control activities. A total of 1,148 county health department chest and out-patient clinics were attended. There were 249 days spent assisting with special x-ray and tuberculin testing surveys, and 2,839 aerosol sputums were collected.

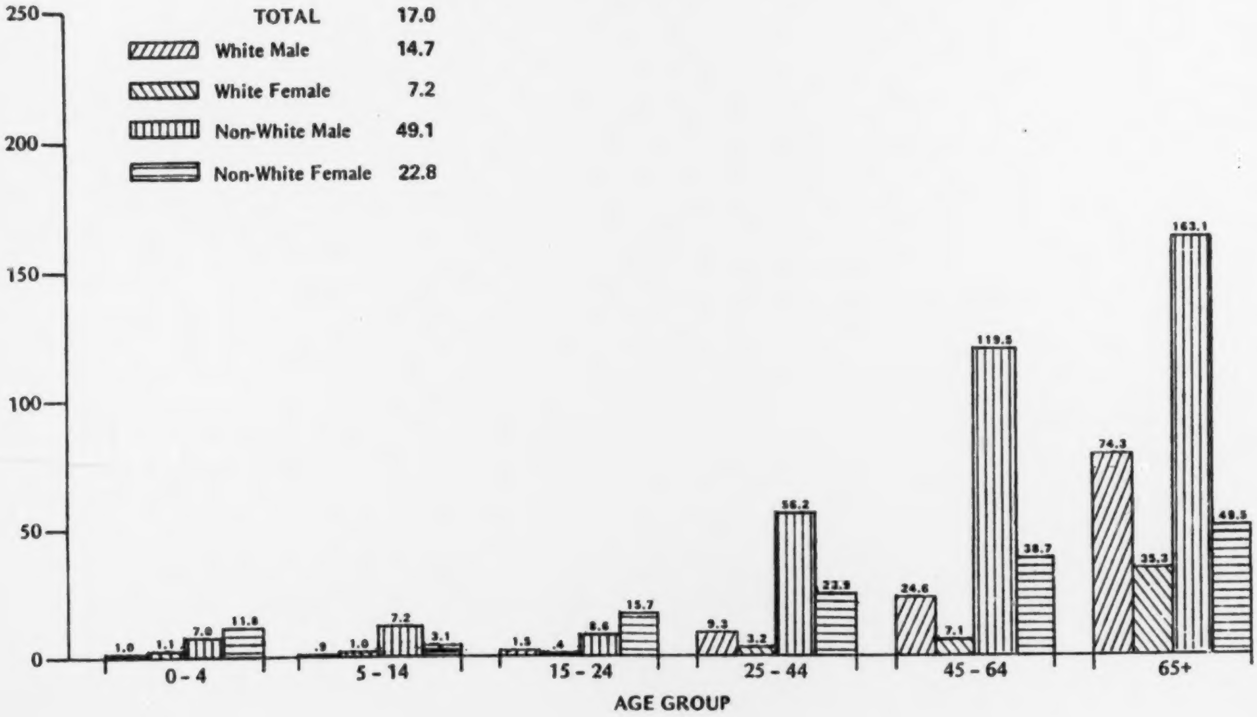
A total of 40,899 Mantoux tests were administered; with 39,551 by the Ped-O-Jet technique and 1,348 with the syringe.

Activities of the X-Ray Technicians

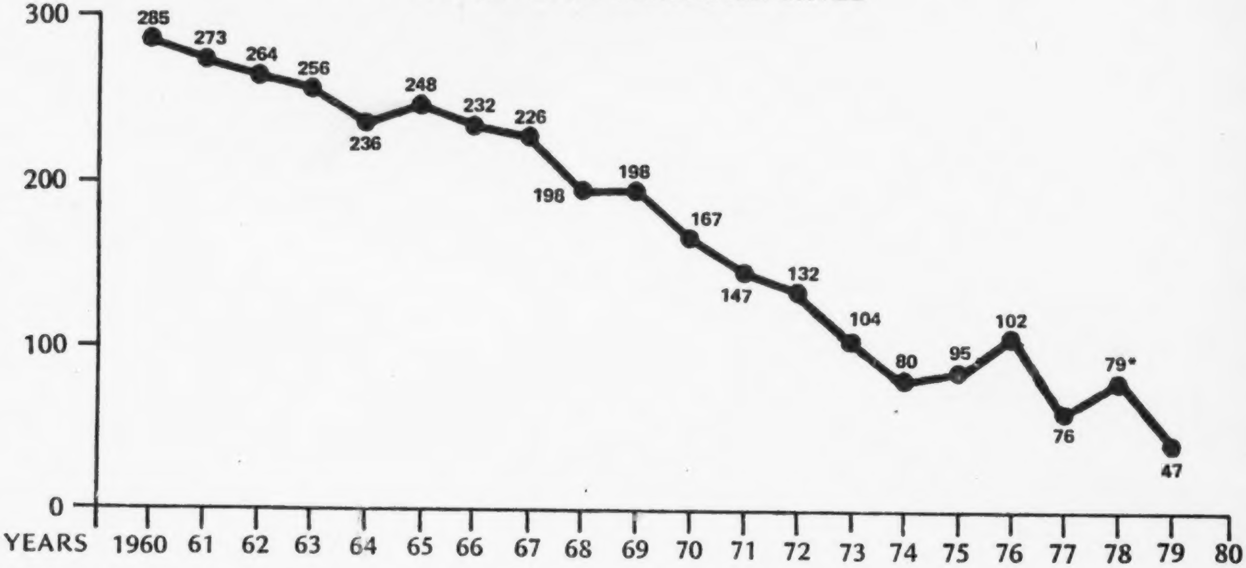
During 1979 the x-ray technicians assisted in 38 tuberculin skin testing programs and administered a total of 23,718 tuberculin tests. They held 902 regular and outpatient clinics at the county health departments and performed a total of 18,386 x-ray examinations.

The x-ray technicians are also responsible for maintaining all the x-ray film files and for maintenance of all skin testing equipment. The chief x-ray technician is responsible for the maintenance of all x-ray and sputum induction equipment on a statewide basis.

ALABAMA
NEW TUBERCULOSIS CASE RATE PER 100,000 POPULATION BY AGE GROUP, RACE & SEX–1979
TOTAL–644



ALABAMA
TUBERCULOSIS DEATHS REPORTED

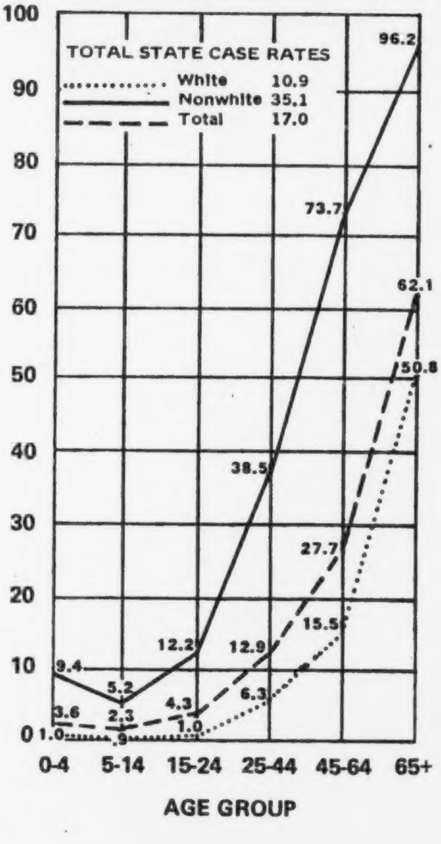


*Provisional through December 1978

ALABAMA
NEW TB CASES REPORTED IN 1979
By Source of Original Report

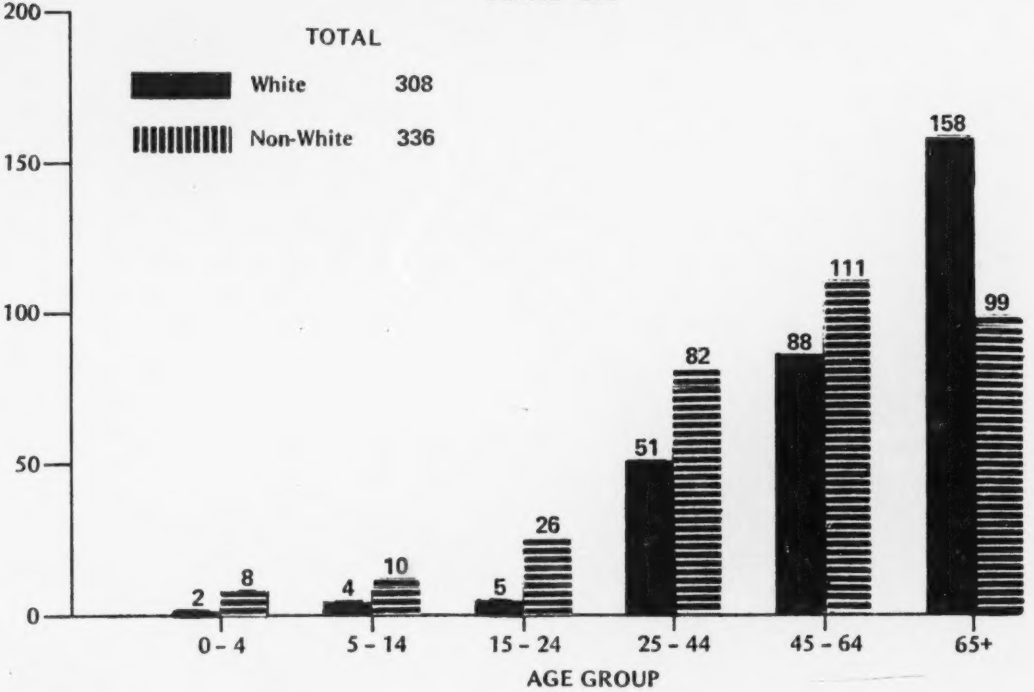
	No. Cases	% of Total Reported
Penal & Mental Institutions	4	.6
General Hospitals	240	37.3
Veterans' Hospitals	34	5.3
County Health Departments	222	34.5
Out-of-State Health Departments	1	.2
Private Physicians	136	21.1
Death Certificates (or same day as death)	5	.8
Military	1	.1
All Other Sources	1	.1
GRAND TOTAL	644	100.0%

ALABAMA
NEW TUBERCULOSIS CASE RATES PER 100,000 POPULATION BY AGE GROUP & RACE–1979

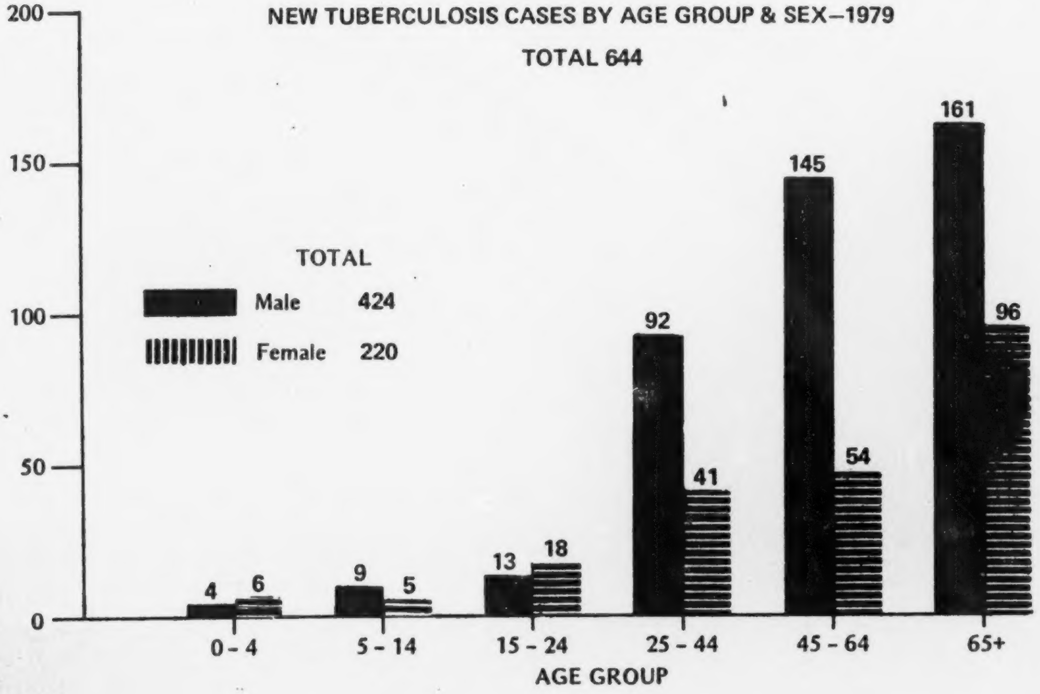


ALABAMA

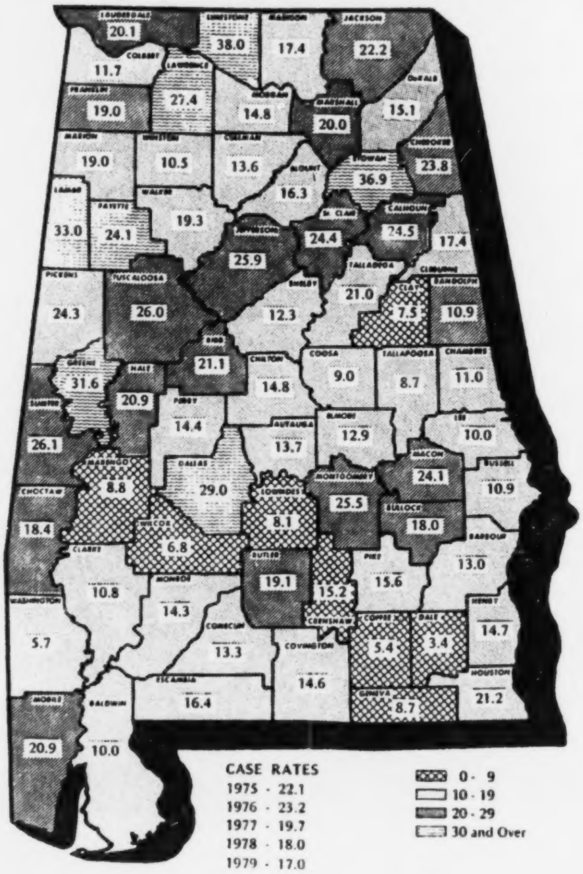
NEW TUBERCULOSIS CASES BY AGE GROUP & RACE--1979
TOTAL–644



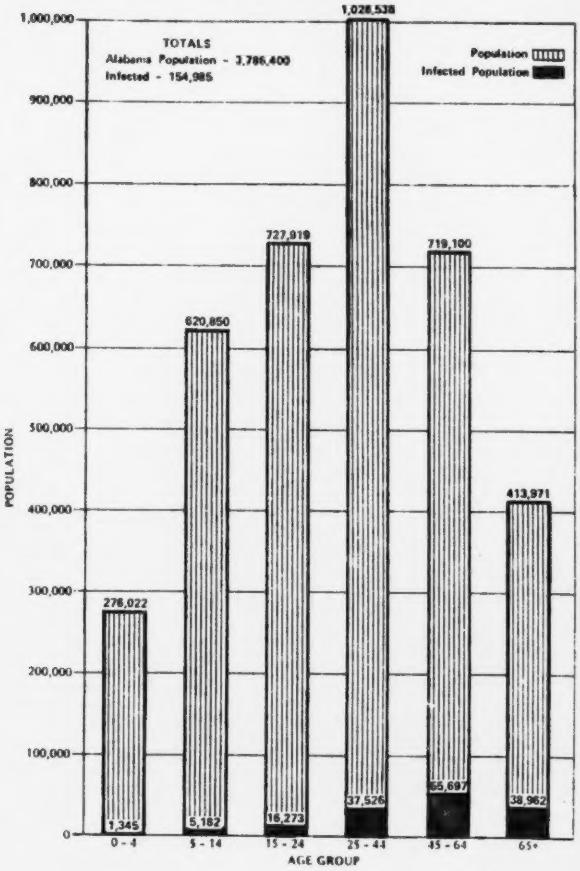
ALABAMA


NEW TUBERCULOSIS CASES BY AGE GROUP & SEX–1979
TOTAL 644

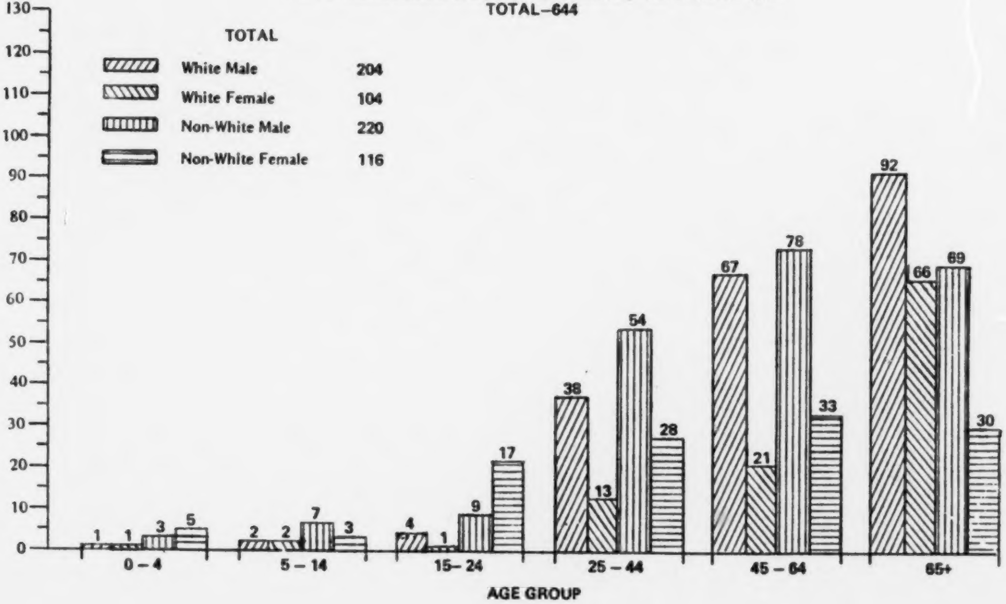
ALABAMA
AVERAGE TB CASE RATES PER 100,000 POPULATION
1975-1979


LAUDERDALE 20.1
LIMESTONE 38.0
MADISON 17.4
JACKSON 22.2
COLBERT 11.7
LAWRENCE 27.4
DeKALB 15.1
FRANKLIN 19.0
MORGAN 14.8
MARSHALL 20.0
MARION 19.0
WINSTON 10.5
CULLMAN 13.6
ETOWAH 36.9
CHEROKEE 23.8
BLOUNT 16.3
LAMAR 33.0
FAYETTE 24.1
WALKER 19.3
JEFFERSON 25.9
ST. CLAIR 24.4
CALHOUN 24.5
17.4
TALLADEGA 21.0
CLEBURNE
PICKENS 24.3
TUSCALOOSA 26.0
SHELBY 12.3
CLAY 7.5
RANDOLPH 10.9
BIBB 21.1
GREENE 31.6
HALE 20.9
CHILTON 14.8
COOSA 9.0
TALLAPOOSA 8.7
CHAMBERS 11.0
SUMTER 26.1
PERRY 14.4
AUTAUGA 13.7
ELMORE 12.9
LEE 10.0
MARENGO 8.8
DALLAS 29.0
LOWNDES 8.1
MONTGOMERY 25.5
MACON 24.1
RUSSELL 10.9
CHOCTAW 18.4
WILCOX 6.8
BULLOCK 18.0
BARBOUR 13.0
CLARKE 10.8
MONROE 14.3
BUTLER 19.1
15.2
PIKE 15.6
CRENSHAW
WASHINGTON 5.7
CONECUH 13.3
COFFEE 5.4
DALE 3.4
HENRY 14.7
COVINGTON 14.6
ESCAMBIA 16.4
GENEVA 8.7
HOUSTON 21.2
MOBILE 20.9
BALDWIN 10.0
CASE RATES
1975 - 22.1
1976 - 23.2
1977 - 19.7
1978 - 18.0
1979 - 17.0
0 - 9
10 - 19
20 - 29
30 and Over

ALABAMA
TOTAL POPULATION AND PERSONS INFECTED WITH TUBERCLE BACILLI
BY AGE GROUP, 1979

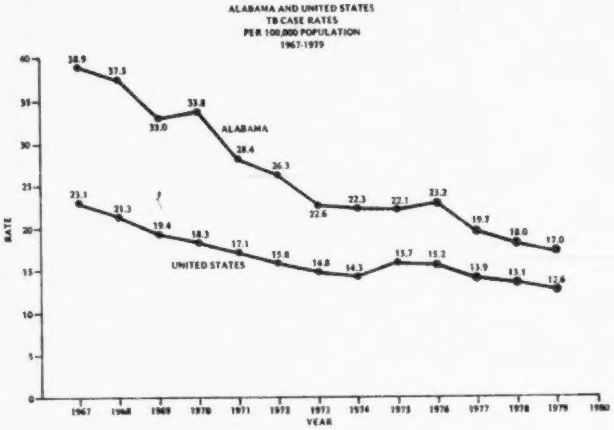


ALABAMA
NEW TUBERCULOSIS CASES BY AGE GROUP, RACE & SEX—1979
TOTAL—644



ALABAMA TUBERCULOSIS PROGRAM PERSONS PLACED ON PREVENTIVE THERAPY BY COUNTY—1979

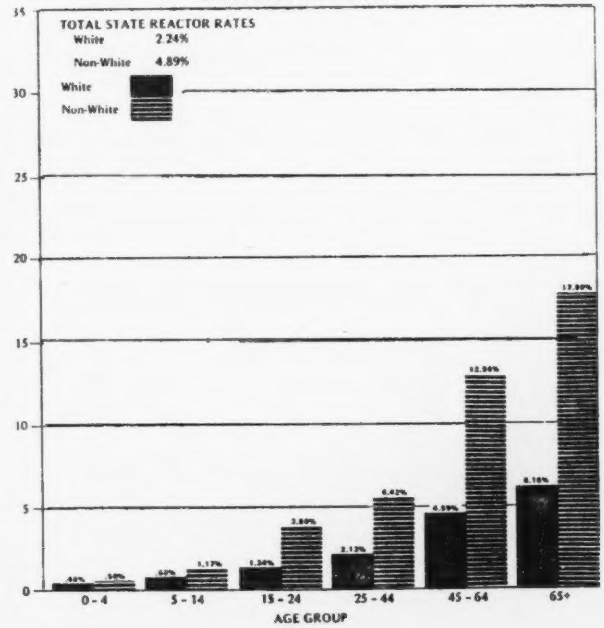
Autauga	23
Baldwin	64
Barbour	11
Bibb	1
Blount	15
Bullock	10
Butler	14
Calhoun	170
Chambers	29
Cherokee	9
Chilton	23
Choctaw	5
Clarke	37
Clay	5
Cleburne	7
Coffee	72
Colbert	37
Conecuh	30
Coosa	5
Covington	37
Crenshaw	12
Cullman	77
Dale	89
Dallas	150
DeKalb	45
Elmore	20
Escambia	56
Etowah	240
Fayette	10
Franklin	16
Geneva	21
Greene	29
Hale	37
Henry	9
Houston	97
Jackson	52
Jefferson	1,028
Lamar	10
Lauderdale	36
Lawrence	17
Lee	51
Limestone	28
Lowndes	11
Macon	96
Madison	179
Marengo	91
Marion	23
Marshall	64
Mobile	582
Monroe	15
Montgomery	274
Morgan	67
Perry	24
Pickens	49
Pike	41
Randolph	8
Russell	44
St. Clair	44
Shelby	44
Sumter	39
Talladega	71
Tallapoosa	14
Tuscaloosa	380
Walker	99
Washington	1
Wilcox	10
Winston	13
TOTAL	5,017



ALABAMA NEW TUBERCULOSIS CASES 1965-1979

STATE TOTAL	14,819
New Cases from INH Preventive Therapy Group	353
Less Than 12 Months of INH Preventive Therapy	325
12 Months or More of INH Preventive Therapy	28

ALABAMA
TUBERCULIN POSITIVE REACTOR RATE
BY AGE GROUP AND RACE, 1979



ALABAMA
TUBERCULOSIS PROGRAM
INDIVIDUALS PLACED ON INH PREVENTIVE THERAPY BY RACE AND SEX AND YEAR STARTED
1965-1979

Persons Started on INH Preventive Therapy
Race and Sex

YEARS	WM	WF	NWM	NWF	NOT STATED	TOTAL
1964					49	49
1965	86	105	226	283	186	886
1966	145	180	543	622	1,855	3,345
1967	184	240	635	843	2,303	4,205
1968	332	391	965	1,255	3,592	6,535
1969	294	314	795	1,168	4,744	7,315
1970	1,358	1,576	1,750	2,322	7,120	14,126
1971	2,735	3,014	3,046	3,682	164	12,641
1972	2,553	2,884	3,281	4,048	117	12,883
1973	2,067	2,403	2,489	3,649	119	10,727
1974	1,666	1,919	1,731	2,423	38	7,777
1975	1,333	1,580	1,665	1,966	10	6,554
1976	1,492	1,586	1,687	1,882	32	6,679
1977	1,187	1,400	1,455	1,674	20	5,736
1978	1,266	1,533	1,618	1,802	19	6,238
1979	1,091	1,219	1,250	1,444	13	5,017
Grand Total	17,789	20,344	23,136	29,064	20,380	110,713
% of Total	16.1	18.4	20.9	26.2	18.4	100.0

ALABAMA
TUBERCULOSIS CONTROL DIVISION
PULMONARY & EXTRAPULMONARY CASES
1965-1979

YEAR	PULMONARY CASES	EXTRAPULMONARY CASES	TOTAL TB CASES REPORTED
1965	1,374	43	1,417
1966	1,162	52	1,214
1967	1,322	57	1,379
1968	1,281	57	1,338
1969	1,129	74	1,203
1970	1,111	55	1,166
1971	909	76	985
1972	859	59	918
1973	735	55	790
1974	721	64	785
1975	719	61	780
1976	760	64	824
1977	634	70	704
1978	601	71	672
1979	580	64	644
TOTALS	13,897	922	14,819

NEW TUBERCULOSIS CASES BY RACE AND SEX
1960-1979

YEAR	TOTAL	WHITE			NONWHITE		
		TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
1960	1,400	814	515	299	586	347	239
1961	1,357	718	478	240	639	369	270
1962	1,266	698	479	219	568	336	232
1963	1,326	716	478	238	610	385	225
1964	1,259	691	446	245	568	349	219
1965	1,417	748	525	223	669	413	256
1966	1,214	565	398	167	649	387	262
1967	1,379	618	423	195	761	463	298
1968	1,338	599	410	189	739	455	284
1969	1,203	508	353	155	695	421	274
1970	1,166	543	383	160	623	400	223
1971	985	455	319	136	530	321	209
1972	918	459	310	149	459	320	139
1973	790	361	244	117	429	288	141
1974	785	351	239	112	434	293	141
1975	780	354	237	117	426	289	137
1976	824	392	280	112	432	292	140
1977	704	314	214	100	390	269	121
1978	672	317	229	88	355	236	119
1979	644	308	204	104	336	220	116

CONTRACT HOSPITAL INFORMATION

July 1, 1978 to March 31, 1979

Contract Hospital	Current Bed Allocation @ $30 Per Day	Admissions	Discharges	Total Pat. Days	Average Patient Stay	Average Per Diem Cost	Total Hosp. Cost	Average Hosp. Cost Per Pat. Treated
Cooper Green Hospital Birmingham, Alabama	17	51	52	908	17.5	$204.16	$185,376.72	$3,564.94
Druid City Hospital Tuscaloosa, Alabama	15	53	49	919	18.8	$190.35	$174,934.80	$3,570.10
Eliza Coffee Mem. Hosp. Florence, Alabama	3	7	7	73	10.4	$121.89	$ 8,898.00	$1,271.14
Lanier Memorial Hosp. Langdale, Alabama	4	3	3	38	12.7	$130.60	$ 4,962.90	$1,654.30
Mountain View Hosp. Gadsden, Alabama	20	90	104	2,856	27.5	$ 97.38	$278,112.00	$2,674.15
St. Margaret's Hosp. Montgomery, Alabama	5	21	20	437	21.9	$165.89	$ 72,494.70	$3,624.74
University of South Ala. Medical Center Mobile, Alabama	7	42	43	662	15.4	$206.47	$136,682.22	$3,178.66
Totals	71	267	278	5,893	21.2	$146.18	$861,461.34	$3,098.78

HOSPITAL
PATIENT ADMISSIONS AND DISCHARGES
1970-1978

YEAR	1970	1971	1972	1973*	1974	1975	1976	1977	1978	1979
Total Admissions	1,126	1,134	1,016	745	668	557	459	473	470	358
Total Discharges	1,103	1,273	1,095	1,016	738	547	512	465	482	357
Average Census First of each month	607	509	423	307	100	42	40	32	28	19

*Beginning of General Hospital Contract Program

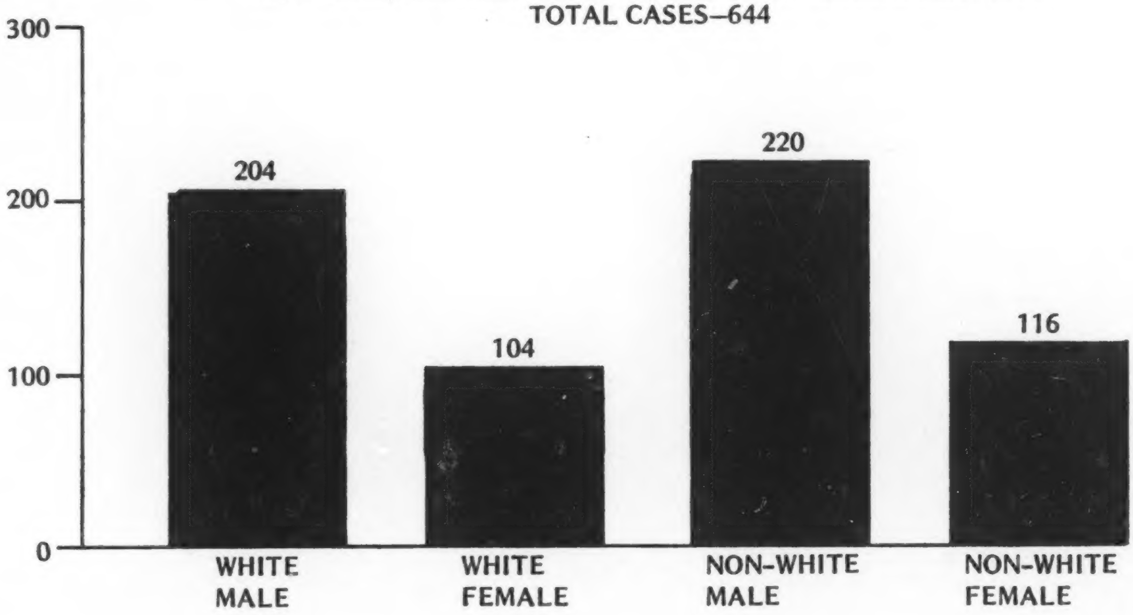
TUBERCULIN TESTING PROGRAM
1979

Group Tested	Total Tested	Total Read by Race				Reactors 10 mm or More				Percent Reactors by Race			
		White	Non-White	Not Stated	Total	White	Non-White	Not Stated	Total	White	Non-White	Not Stated	Total
Kindergarten	3,134	1,121	1,701	66	2,888	7	8	0	15	.62	.47	–	.52
First Grade	1,339	727	464	29	1,220	6	3	0	9	.83	.65	–	.74
Seventh Grade	554	252	213	5	470	2	2	0	4	.79	.94	–	.85
Eighth Grade	779	420	271	9	700	3	4	0	7	.71	1.48	–	1.00
Ninth Grade	873	490	264	7	761	4	1	1	6	.82	.38	14.29	.79
Other Grade	7,226	4,324	2,316	89	6,729	34	42	2	78	.79	1.81	2.25	1.16
School Teacher	23,064	17,045	4,886	307	22,238	103	87	2	192	.60	1.78	.65	.86
Other School Employee	8,165	5,692	1,973	112	7,777	65	88	3	156	1.14	4.46	2.68	2.01
Food Handler	10,399	6,238	2,900	224	9,362	124	155	4	283	1.99	5.34	1.79	3.02
Contact	11,165	6,656	3,075	202	9,933	469	438	21	928	7.05	14.24	10.40	9.34
Other	68,177	36,601	17,453	1,542	55,596	772	1,033	39	1,844	2.11	5.92	2.53	3.32
Not Stated	86,351	35,464	30,945	2,841	69,250	993	1,389	73	2,455	2.80	4.49	2.57	3.55
GRAND TOTAL	221,226	115,030	66,461	5,433	186,924	2,582	3,250	145	5,977	2.24	4.89	2.67	3.20

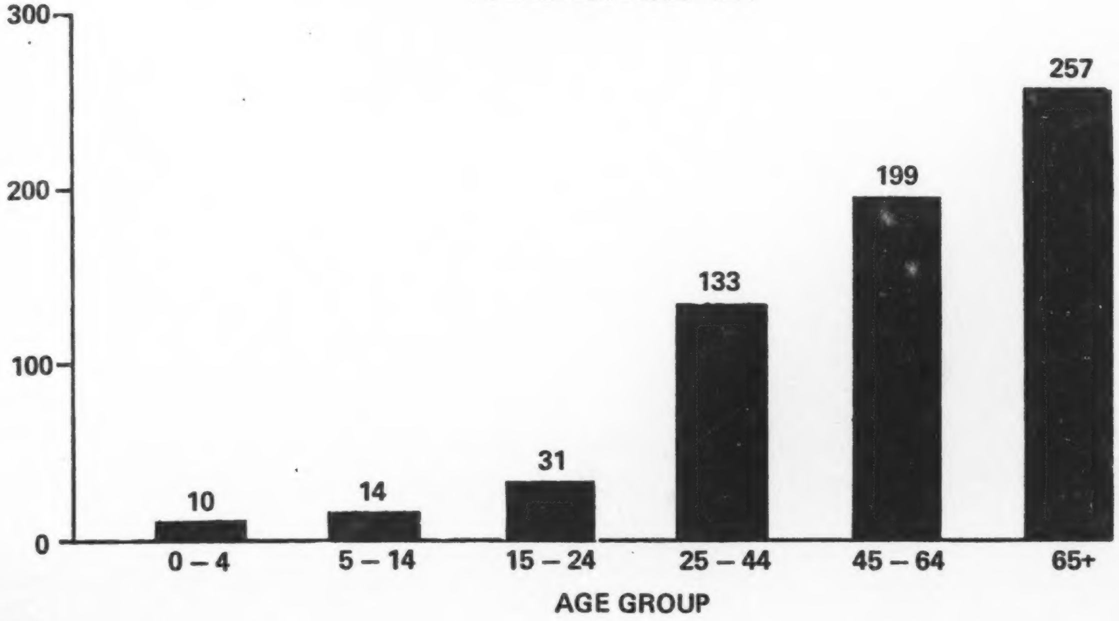
TUBERCULIN TESTING PROGRAM
1979

Group Tested	Total Tested	Total Read by Race				Reactors 10 mm or More				Percent Reactor Rate by Race			
		White	Non-White	Not Stated	Total	White	Non-White	Not Stated	Total	White	Non-White	Not Stated	Total
0–4	23,840	8,665	7,936	757	17,358	42	40	2	84	.48	.50	.26	.48
5–14	41,704	16,526	15,260	1,168	32,954	113	178	6	297	.68	1.17	.51	.90
15–24	51,523	23,347	16,589	1,347	41,283	313	631	25	969	1.34	3.80	1.86	2.35
25–44	66,334	41,635	17,363	1,256	60,254	888	1,115	41	2,044	2.13	6.42	3.26	3.39
45–64	29,208	19,359	7,366	653	27,378	888	955	50	1,893	4.59	12.96	7.66	6.91
65 & Over	8,109	5,294	1,792	224	7,310	326	319	20	665	6.16	17.80	8.93	9.10
Not Stated	508	204	155	28	387	12	12	1	25	5.88	7.74	3.57	6.46
GRAND TOTAL	221,116	115,030	66,461	5,433	186,924	2,582	3,250	145	5,977	2.24	4.89	2.67	3.20

ALABAMA
NEW TUBERCULOSIS CASES REPORTED BY RACE & SEX—1979
TOTAL CASES—644



ALABAMA
NEW TUBERCULOSIS CASES BY AGE GROUP—1979
TOTAL ALL AGES—644



ALABAMA
TUBERCULOSIS DIVISION
CONTRACT HOSPITAL INFORMATION
1979

HOSPITAL	ADMISSIONS	DISCHARGES	PATIENT DAYS	AVERAGE PT. STAY
Cooper Green Hospital Birmingham, Alabama	61	61	1,126	18.5
Druid City Hospital Tuscaloosa, Alabama	90	89	1,655	18.6
Eliza Coffee Hospital Florence, Alabama	18	16	265	16.6
Lanier Mem. Hospital Langdale, Alabama	3	4	78	19.5
Mountain View Hospital Gadsden, Alabama	110	117	2,558	21.9
St. Margaret's Hospital Montgomery, Alabama	22	20	387	19.4
Univ. of So. Alabama Medical Center Mobile, Alabama	54	50	576	11.5
Totals Contract Hospitals	358	357	6,645	18.6

DIVISION OF VENEREAL DISEASE

In 1979 Alabama reported 301 civilian cases of primary and secondary syphilis and 240 cases of early latent syphilis (less than one year's duration). Over the previous year these totals represent an increase of 51.3% in primary and secondary and a 17.6% increase in early latents. Total syphilis increased by 37.6%. Although epidemiological efforts were intensified statewide, Mobile remained a problem area contributing to 39% of Alabama's early syphilis morbidity. Reasons attributed to Mobile's problems are inexperienced staff and staffing problems, infectious cases crossing state lines, prostitution, and an almost complete shutdown of epi activities for approximately a month due to Hurricane Frederic. However, in late 1979 many of Mobile's problems were solved, and 1980 should reflect a decrease in infectious syphilis not only for Mobile but the entire state.

During the past year Alabama reported 25,348 cases of gonorrhea as compared to 24,436 in 1978. This represents an increase of 3.7%. Again in 1979 the Gonorrhea Culture Screening Program was a very productive case-finding activity. The Screening Program processed 309,485 patients in 1979 with a positivity rate of 4.10% as compared to 293,524 cultures for 1978 with a positivity rate of 4.42%. Tables, graphs and charts included as a part of this report give additional information.

The increase in gonorrhea morbidity and screening can be attributed to several factors. There are increased efforts to return all infected patients for a test-of-cure and rescreening culture, increased interviewing of infected patients and their sexual contacts, educational information and pamphlets being passed out during the interview, intensified epidemiological activities, and the implementation of a Pelvic Inflammatory Disease Program (PID). The PID Program is designed to identify, treat and epidemiologically pursue all cases of PID processed through the health department venereal disease and nonvenereal disease clinics as well as those patients seen in the state's hospital emergency rooms. The major objectives of the PID Program are to:

1. Ensure proper medical management of the patient on an outpatient basis.
2. Help prevent future complications for the patient.
3. Prevent reinfections by rapidly identifying and treating patients' sex partners.

During 1979 the Syphilis Reactor Unit of the Venereal Disease Control Division identified and visited those laboratories that were remiss in reporting reactive serologic tests to the division. Other laboratories that were not reporting all of the required information were also visited. This action strengthened the Reactor Surveillance Unit's follow-up activities.

In 1979 new employees entering the Venereal Disease Program were oriented to their jobs through the use of twelve lesson plans. This quickly improved the employees' technical knowledge about venereal disease. To enhance their knowledge of epidemiology, a special three-day course was designed on the concept of venereal disease epidemiology. This course was taught by the Venereal Disease Division Training Officer on three different occasions.

Venereal disease education and information was demonstrated in 1979 as being an essential component of the epidemiological process to control venereal disease in Alabama. In efforts to have a significant impact on the epidemiological process, program objectives and procedures were established in the areas of patient education, VD education in public schools, personnel assistance and in community awareness. Activities, pamphlets and audiovisual materials were designed and used in each area of emphasis. As a result, infected individuals were self-motivated to obtain medical examinations and treatment, thus indicating the effectiveness of the Education and Information Program.

ALABAMA 1979—NEW CASES
PRIVATE PHYSICIANS, CLINICS—BY COUNTY, AGE, SEX AND RACE
ANNUAL REPORT FOR PRIMARY AND SECONDARY SYPHILIS

COUNTY	0 - 14				15 - 19				20 - 24				25 - 34				35 - 54				55 - Over				Not Stated				Total
	White		Non-White		White		Non-White		White		Non-White		White		Non-White		White		Non-White		White		Non-Whc.		White		Non-Wht.		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Autauga 01															1		1												2
Baldwin 02											2																		2
Barbour 03																													
Bibb 04																1													1
Blount 05																													
Bullock 06																													
Butler 07												1				1													2
Calhoun 08							1					1				1			1	1									5
Chambers 09																													
Cherokee 10																													
Chilton 11																													
Choctaw 12																1													1
Clark 13											1																		1
Clay 14																													
Cleburne 15																													
Coffee 16				1				1																					2
Colbert 17																													
Conecuh 18																													
Coosa 19																													
Covington 20								1																					1
Crenshaw 21																													
Cullman 22						1																							1
Dale 23																													
Dallas 24																			1										1
Dekalb 25													1																1
Elmore 26												1			1					1									3
Escambia 27																													
Etowah 28					1								2																3
Fayette 29																													
Franklin 30																													
Geneva 31													1																1
Greene 32																													
Hale 33																													
Henry 34																													
Houston 35											1				1		1												3
Jackson 36																		1											1
Jefferson 37							1	1	1		3			1	4	3	2	1	2	1	2	1							23
Lamar 38																													
Lauderdale 39																													
Lawrence 40																													
Lee 41									1		1						1												3
Limestone 42								1																					1
Lowndes 43												1																	1
Macon 44															1														1
Madison 45								1			2																		3
Marengo 46															1	1													2
Marion 47																													
Marshall 48					1								1																2
Mobile 49						1	17	13	2		43	12	4		28	12	1		9	1			1						144
Monroe 50															1	2													3
Montgomery 51							11	4	1		17	2	1		9	7			2	2									56
Morgan 52							1	1							1	1													4
Perry 53																													
Pickens 54																													
Pike 55																													
Randolph 56																													
Russell 57							1	1			3	3			6	2			1										17
St. Clair 58																													
Shelby 59													1	1				1											3
Sumter 60																													
Talladega 61																													
Tallapoosa 62														1															1
Tuscaloosa 63									1						1														2
Walker 64																													
Washington 65															1														1
Wilcox 66												1			1					1									3
Winston 67																													
TOTAL				1	2	2	32	24	6		74	21	11	3	57	32	6	3	16	7	2	1	1						301

ALABAMA 1979—NEW CASES
PRIVATE PHYSICIANS, CLINICS—BY COUNTY, AGE, SEX AND RACE
ANNUAL REPORT FOR GONORRHEA

COUNTY	0 - 14				15 - 19				20 - 24				25 - 34				35 - 54				55 - Over				Not Stated				Total
	White		Non-White		White		Non-White		White		Non-White		White		Non-White		White		Non-White		White		Non-Wht.		White		Non-Wht.		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Autauga 01						2	1	11		3	1	12	3		1	7		1											42
Baldwin 02			1	1	2	11	6	21	5	8	11	26	4	5	7	9	3		3	4									127
Barbour 03				2		1	3	15		2	6	15			6	9	1			2									62
Bibb 04					1		1	4	1		3	13	2	2	3	6				1									37
Blount 05					2	9	1		2	9		3	1	5			1	2											35
Bullock 06			1				12	26		3	17	13			1	5		1	1										80
Butler 07						2	12	4	1	1	12	8			11	9			4				3						67
Calhoun 08				3	10	25	32	75	9	37	58	71	11	20	11	21	6	2	5	4	1		1	1					403
Chambers 09	1	1			1	1	35	24	1		19	10	3	4	22	11			1										134
Cherokee 10					3	2				3	1	2		1	1	1													14
Chilton 11		1		1	1	9	1	13	2	7		13		1		2		1											52
Choctaw 12				2				6		1		7				6			1										23
Clark 13				1		2	1	7		3		7				2							1						24
Clay 14								3				1				2													6
Cleburne 15						2		1		1	1	1			1	1													8
Coffee 16				2		4	13	13	4	5	9	11	2	2	9	1	1		3										79
Colbert 17		1	1	3	7	26	8	18	17	32	12	23	9	22	4	17	1	6	3	3		1							214
Conecuh 18						1		3			4	10			1	2													21
Coosa 19								1				3																	4
Covington 20				2	3	2	8	14	4	9	20	10	7	3	12	7		2	6				1						110
Crenshaw 21				1	1	2	7	18	2	1	12	23	2		13	9			1										92
Cullman 22					5	16			16	11	2	1	6	2	2	1													62
Dale 23			1		2	3	5	7	1	7	7	9	4	4	9	3		2	1	3									68
Dallas 24			8	14	4	17	144	206	21	17	336	201	12	7	154	120	2		22	14			1	2					1302
Dekalb 25					1	4		1	2	5	2	1	3	6		2		1											28
Elmore 26				2	1	5	1	40	2	6	5	21		2	2	14	1	2						3					107
Escambia 27				2		9		18	2	3	2	11		4	1	10													62
Etowah 28			2	7	9	18	18	16	19	29	40	18	26	15	13	8	1	3	3	1									246
Fayette 29								1	1	1		1		2		1	1												8
Franklin 30					3	5		1	2	6		5	6	4		1													33
Geneva 31							1	1				2				1													5
Greene 32			2	1			8	15			3	14				8				1									52
Hale 33				1	1	1	6	18			4	24		1	4	10			1					1					72
Henry 34						4		7			1	7		1	1	4				3									28
Houston 35		1	10	5	14	31	56	69	27	29	79	72	16	20	71	42	1	3	12	5			1						564
Jackson 36					1	16			5	3		3	5	2															35
Jefferson 37	2	5	19	44	94	205	507	1083	210	233	1246	1384	194	147	949	756	36	16	129	59		3	4	3					7331
Lamar 38						2		3		4	2	3		1	1	1				1									18
Lauderdale 39		1			17	35	6	14	25	35	9	19	18	31	5	13	3	7	2	5									245
Lawrence 40				2	1	7		6	2	6	2	7	1	1	3	3													41
Lee 41			1	6	12	23	47	58	14	12	72	34	13	6	46	20	4		8	2		1							379
Limestone 42		2		2	2	5	12	27	7	8	9	27	4	3	12	8		1	2										131
Lowndes 43			2	13		1	60	96	2	1	116	126	1	2	56	101		2	15	38			6	3					641
Macon 44				1	1		25	46	1		53	56			21	8			1	5									218
Madison 45		1	4	6	42	131	98	159	93	138	242	179	57	49	121	60	14	9	18	8		1	1	1					1432
Marengo 46								5			1	4		1															11
Marion 47					1	5		1	3	5			4	1		1													21
Marshall 48	1	2			7	16	3	3	9	10	2	2	5	9		4	1	1			1			1					77
Mobile 49		9	11	26	36	119	342	547	93	157	664	637	85	84	413	293	14	18	64	29	1	1	8						3651
Monroe 50								6	1	3	1	3				5													19
Montgomery 51		5	12	45	27	74	521	607	67	68	856	597	60	37	475	283	15	8	52	31	1		3	2					3846
Morgan, 52				5	13	38	21	60	17	39	19	27	30	26	21	11	5	1	1	1	1								336
Perry 53								3			1	4				2													10
Pickens 54						2	4	16			2	7			1	6				2									40
Pike 55					1	6	20	37	2	2	33	29		1	13	8			2	2									156
Randolph 55				1	2	1	4		1		3	6	1		2	2			1										24
Russell 57	1				4	7	25	39	6	5	31	45	2	4	16	16	2	1	1	2			3						210
St. Clair 58						2		2		1	3		2	1		2	1		1										15
Shelby 59					6	9	1	20	7	11	13	11	8	5	5	8	1	3	1	1									112
Sumter 60				3			4	11	1		12	24			8	12			4				4	1					84
Talladega 61				3	7	10	20	50	17	9	28	56	10	4	21	20	2	2	4										263
Tallapoosa 62				1		5	1	13		1	2	9		2		5													39
Tuscaloosa 63		2	8	23	13	31	142	274	28	47	225	289	23	30	149	168	5	6	21	20			4	2					1510
Walker 64		1			1	14		2	5	9	1	10	4	8		2		1	1										59
Washington 65								1				2																	3
Wilcox 66				2			6	24			22	27			7	15			1										104
Winston 67					3	2			4	3				2			1	1											16
TOTAL	5	33	83	233	352	980	2249	3890	761	1049	4337	4296	644	590	2705	2185	125	103	396	247	5	7	41	22					25,348

ALABAMA COUNTY MORBIDITY (MILITARY EXCLUDED)
RATE PER 100,000 POPULATION

	PRI & SEC SYPHILIS				TOTAL SYPHILIS		GONORRHEA			
	1978		1979		1978	1979	1978		1979	
	CASES	RATE	CASES	RATE	CASES	CASES	CASES	RATE	CASES	RATE
01.AUTAUGA	0	0	2	6.8	0	5	69	236.3	42	141.9
02.BALDWIN	0	0	2	2.6	0	2	170	250.0	127	167.1
03.BARBOUR	0	0	0	0	2	0	120	579.7	62	245.1
04.BIBB	0	0	1	6.7	0	2	51	380.6	37	248.3
05.BLOUNT	0	0	0	0	0	0	24	85.4	35	102.0
06.BULLOCK	0	0	0	0	0	0	71	676.2	80	689.7
07.BUTLER	1	5.1	2	9.2	1	4	59	298.0	67	308.8
08.CALHOUN	1	1.0	5	4.2	3	7	430	394.5	403	339.2
09.CHAMBERS	2	5.7	0	0	4	0	85	241.5	134	354.5
10.CHEROKEE	1	6.7	0	0	1	0	17	114.1	14	75.7
11.CHILTON	0	0	0	0	0	1	75	303.6	52	173.3
12.CHOCTAW	0	0	1	6.1	0	1	4	25.8	23	139.4
13.CLARKE	0	0	1	3.6	0	2	28	101.8	24	86.0
14.CLAY	0	0	0	0	3	0	12	93.8	6	42.3
15.CLEBURNE	0	0	0	0	0	0	4	36.4	8	66.1
16.COFFEE	1	2.6	2	5.6	4	4	61	158.9	79	220.0
17.COLBERT	3	5.7	0	0	3	0	205	392.0	214	427.1
18.CONECUH	0	0	0	0	0	0	18	129.5	21	130.4
19.COOSA	0	0	0	0	1	0	9	84.1	4	34.8
20.COVINGTON	5	15.3	1	2.8	8	1	96	293.6	110	309.9
21.CRENSHAW	1	8.5	0	0	1	0	17	144.1	92	638.9
22.CULLMAN	0	0	1	1.6	2	1	68	117.0	62	101.3
23.DALE	0	0	0	0	1	3	71	100.0	68	141.1
24.DALLAS	2	3.7	1	1.8	3	5	1154	2133.1	1302	2402.2
25.DEKALB	2	4.7	1	1.9	7	1	39	91.8	28	54.2
26.ELMORE	0	0	3	7.1	0	3	55	[illegible]52.8	107	254.2
27.ESCAMBIA	0	0	0	0	0	0	75	[illegible].3	62	173.2
28.ETOWAH	3	3.3	3	3.0	4	5	249	[illegible]	246	246.7
29.FAYETTE	0	0	0	0	0	0	10	[illegible]	8	47.3
30.FRANKLIN	0	0	0	0	0	0	20	[illegible]	33	120.9
31.GENEVA	1	4.6	1	4.1	6	3	6	27.[illegible]	5	20.3
32.GREENE	0	0	0	0	0	2	2[illegible]	25[illegible].0	52	500.0
33.HALE	2	15.5	0	0	4	2	[illegible]	410.9	72	470.6
34.HENRY	0	0	0	0	2	1	42	362.1	28	177.2
35.HOUSTON	2	3.3	3	4.1	10	8	400	651.5	564	771.5
36.JACKSON	0	0	1	2.0	0	1	11	26.6	35	68.5
37.JEFFERSON	24	3.7	23	3.5	45	45	8123	1243.4	7331	1114.6
38.LAMAR	0	0	0	0	0	0	8	55.2	18	113.9
39.LAUDERDALE	4	5.4	0	0	9	1	229	312.0	245	314.1
40.LAWRENCE	0	0	0	0	0	0	31	104.4	41	136.2
41.LEE	2	2.8	3	4.2	3	3	314	444.1	379	529.3
42.LIMESTONE	1	2.2	1	2.3	1	2	71	154.3	131	296.4
43.LOWNDES	1	9.3	1	7.2	3	3	357	3305.6	641	4611.5
44.MACON	5	21.6	1	3.8	11	2	200	862.1	218	816.5
45.MADISON	8	3.3	3	1.6	21	6	1328	545.2	1432	759.7
46.MARENGO	0	0	2	8.5	0	9	21	99.1	11	46.6
47.MARION	0	0	0	0	0	0	17	66.7	21	77.5
48.MARSHALL	0	0	2	3.2	0	5	45	75.9	77	123.2
49.MOBILE	63	19.7	144	39.2	101	221	3112	972.8	3651	993.5
50.MONROE	0	0	3	13.0	0	4	14	71.4	19	82.3
51.MONTGOMERY	39	23.4	56	29.3	79	110	3489	2094.2	3846	2013.6
52.MORGAN	7	7.7	4	4.6	8	12	325	356.4	336	384.4
53.PERRY	0	0	0	0	0	1	10	73.0	10	73.5
54.PICKENS	0	0	0	0	0	2	34	179.0	40	180.2
55.PIKE	4	16.5	0	0	11	1	138	570.2	156	573.5
56.RANDOLPH	0	0	0	0	0	1	15	86.2	24	126.3
57.RUSSELL	7	15.7	17	36.5	37	47	243	544.8	210	450.6
58.ST.CLAIR	0	0	0	0	0	0	45	150.0	15	39.8
59.SHELBY	1	2.3	3	4.9	1	4	76	176.7	112	183.3
60.SUMTER	0	0	0	0	0	3	38	263.9	84	509.1
61.TALLADEGA	3	4.6	0	0	8	0	210	322.6	263	377.3
62.TALLAPOOSA	0	0	1	2.8	2	3	40	121.6	39	107.1
63.TUSCALOOSA	3	2.5	2	1.6	4	9	1860	1527.1	1510	1186.2
64.WALKER	0	0	0	0	1	1	56	96.6	59	87.7
65.WASHINGTON	0	0	1	5.5	0	6	6	35.3	3	16.4
66.WILCOX	0	0	3	20.8	0	4	73	510.5	104	722.2
67.WINSTON	0	0	0	0	0	2	9	49.7	16	78.8
TOTAL	199	5.5	301	7.9	415	571	24436	680.6	25348	669.4

VENEREAL DISEASE MORBIDITY REPORT
(Military Excluded)
1979

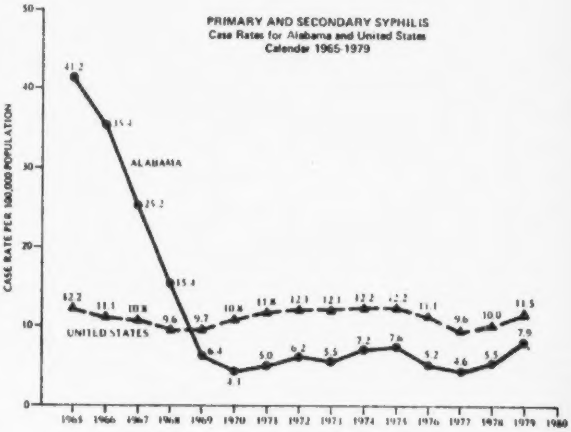
Cases reported for the first time during the period

SOURCE OF REPORT	COLOR AND SEX			SYPHILIS Primary and Secondary	Early Latent	Late and Late Latent	Congenital	Not Stated	GONORRHEA	CHANCROID	GRANULOMA INGUINALE	LYMPHO-GRANULOMA VENEREUM
PRIVATE PHYSICIANS	White	Male	111	15	5	2			375			
		Female	112	4	1	1			1,359			
	All Other	Male	121	43	26	5	2		1,421			
		Female	122	31	21	7			3,963			
		Total,	1XX	93	53	15	2		7,118			
PUBLIC CLINICS	White	Male	211	12	18	3			1,527			
		Female	212	5	8				1,403			
	All Other	Male	221	137	88	5			8,390			
		Female	222	54	73	5			6,910			
		Total,	2XX	208	187	13			18,230			
ALL SOURCES (Above)		Total,	3XX	301	240	28	2		25,348			

Age of Congenital Syphilis Cases: Less than 1 2
1-4 ________
5-9 ________
over 9 ________
Unknown ________

SYPHILIS REPORTED BY PRIVATE PHYSICIANS
Calendar Years 1970-1979

	Primary and Secondary			Total Syphilis		
Year	Total Cases	Private Cases	Percent Private	Total Cases	Private Cases	Percent Private
1970	151	63	41.7%	368	147	39.9%
1971	175	83	47.4%	433	175	40.4%
1972	216	90	41.7%	391	144	36.8%
1973	194	73	37.6%	426	131	30.8%
1974	254	66	26.0%	499	121	24.3%
1975	270	57	21.1%	527	128	24.3%
1976	188	57	30.3%	417	112	26.9%
1977	164	43	26.2%	336	95	28.3%
1978	199	63	31.6%	415	125	30.1%
1979	301	93	30.8%	571	163	28.5%


PRIMARY AND SECONDARY SYPHILIS
Case Rates for Alabama and United States
Calendar 1965-1979

GONORRHEA CASES AND RATES
Calendar Years 1970-1979 (Military Excluded)

Year	Cases	Percent Change	Rate	Rank (FY)
1970	8,470	+35.2%	241.2	27th
1971	10,547	+24.5%	310.0	25th
1972	15,593	+47.8%	449.8	15th
1973	19,093	+22.4%	545.2	9th
1974	20,920	+ 9.6%	594.4	12th
1975	23,586	+12.7%	605.9	11th
1976	24,415	+ 3.5%	686.8	8th
1977	24,263	-0.6%	679.1	10th
1978	24,436	+0.7%	680.5	9th
1979	25,348	+ 3.7%	669.4	13th

GONORRHEA CULTURE TEST RESULTS OF FEMALES

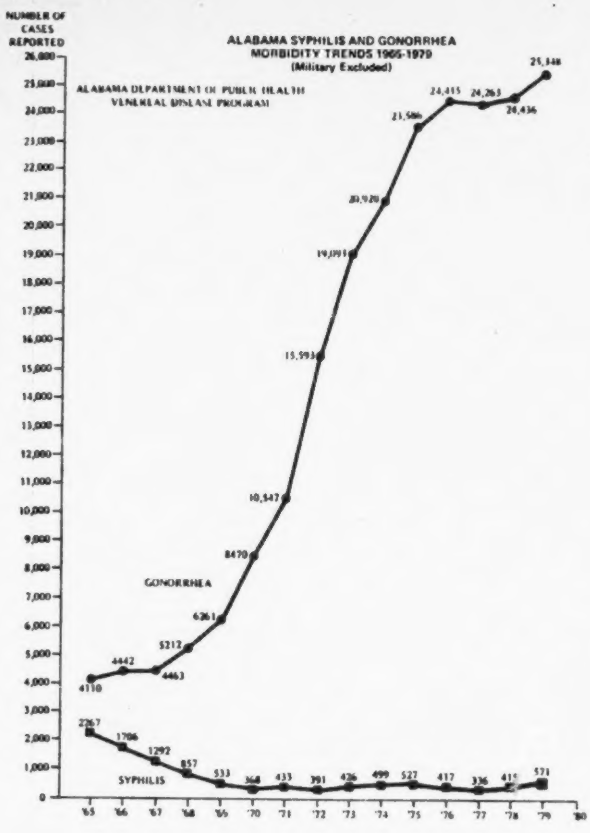
Number Tested and Number Positive By Source of Test (Type of Facility/Health Provider)

(Exclude Tests of Cure)

PROJECT AREA

PERIOD COVERED: From 1-1-79 To 12-31-79

SOURCE OF TEST (TYPE FACILITY)	Number Tested	Number Positive	% Positive
1. Health Dept. Non VD Clinics	(74,606)	(3,498)	(4.69)
(a) Family Planning	55,251	2,557	4.63
(b) Prenatal, OB-GYN	15,599	689	4.42
(c) Cancer Detection	2,009	14	.70
(d) Combinations or Other	1,747	238	13.62
2. Public/Private Hospital-Outpatient	(21,099)	(1,300)	(6.16)
(a) Family Planning	0	0	.00
(b) Prenatal, OB-GYN	5,243	168	3.20
(c) Cancer Detection	0	0	.00
(d) Combinations or Other	15,856	1,132	7.14
3. Public/Private Hospital-Inpatient	(128)	(3)	(2.34)
(a) Obstetric	0	0	.00
(b) Gynecologic	0	0	.00
(c) Combinations or Other	128	3	2.34
4. Community/Neighborhood Health Centers	(3,322)	(341)	(10.26)
(a) Family Planning	697	27	3.87
(b) Prenatal, OB-GYN	0	0	.00
(c) Cancer Detection	44	11	25.00
(d) Combinations or Other	2,581	303	11.74
5. Private Physicians	176,505	3,034	1.72
6. Private Family Planning Groups	17,274	504	2.92
7. Group Health Clinics	3,874	110	2.84
8. Student Health Centers	3,454	77	2.23
9. Manpower Training Agencies	0	0	.00
10. Industrial Screening	0	0	.00
11. Military/Dependents	0	0	.00
12. Correction or Detention Centers	955	43	4.50
13. Not Specified	1	0	0.00
14. TOTAL NON-VD CLINICS	(301,218)	(8,910)	(2.96)
15. Venereal Disease Clinics	(8,267)	(3,782)	(45.75)
(a) Contacts to Gonorrhea	2,381	1,253	52.63
(b) Syphilis: Contacts/Clusters/Reactors	637	120	18.84
(c) Other	5,249	2,409	45.89
16. GRAND TOTAL	309,485	12,692	4.10
17. Number Females With Positive Culture Treated For Gonorrhea:	▨	12,502	98.50



ALABAMA SYPHILIS AND GONORRHEA MORBIDITY TRENDS 1965-1979
(Military Excluded)

REPORTED SYPHILIS TRENDS
Calendar Years 1965-1979

Year	Primary and Secondary	Rate Per 100,000	Percent Change	Total Syphilis	Rate Per 100,000	Percent Change
1965	1,417	41.2	+57.1%	2,254	65.6	+31.5%
1966	1,233	35.4	-13.0%	1,699	48.8	-24.6%
1967	882	25.2	-28.5%	1,270	36.2	-25.3%
1968	541	15.4	-38.7%	837	23.7	-34.1%
1969	226	6.4	-58.2%	519	14.8	-38.0%
1970	151	4.3	-33.2%	368	10.6	-29.1%
1971	175	5.0	+15.9%	433	12.5	+17.7%
1972	216	6.2	+23.0%	391	11.3	- 9.7%
1973	194	5.5	-10.2%	426	12.2	+ 9.0%
1974	254	7.2	+30.9%	499	14.2	+17.1%
1975	270	7.6	+ 6.3%	527	14.9	+ 5.6%
1976	188	5.2	-30.4%	417	11.7	-20.9%
1977	164	4.5	-12.8%	336	9.4	-24.1%
1978	199	5.5	+21.3%	415	11.6	+23.5%
1979	301	7.9	+51.3%	571	15.1	+37.6%

COMPARATIVE PRIMARY AND SECONDARY SYPHILIS RATES
Calendar Years 1965-1979
PER 100,000 FOR ALABAMA AND UNITED STATES

Number Cases			Rate Per 100,000		
Year	Alabama	United States	Alabama	United States	Alabama Case Rate Rank
1965	1,417	23,338	41.2	12.2	1st
1966	1,233	21,414	35.4	11.1	1st
1967	882	21,053	25.2	10.8	3rd
1968	541	19,019	15.4	9.6	8th
1969	226	19,438	6.4	9.7	21st
1970	151	21,770	4.3	10.8	29th
1971	175	23,868	5.0	11.8	26th
1972	216	24,932	6.2	12.1	24th
1973	194	25,079	5.5	12.1	27th
1974	254	25,400	7.2	12.2	23rd
1975	270	25,713	7.6	12.2	24th
1976	188	23,634	5.2	11.1	22nd
1977	164	20,399	4.5	9.6	26th
1978	199	21,656	5.5	10.0	20th
1979	301	25,103*	7.9	11.5	17th*

*Estimated

BUREAU OF LOCAL HEALTH SERVICES

The mission of the Bureau of Local Health Services is to coordinate delivery of public health services to the citizens of Alabama by providing general supervision and support to local health departments. This is accomplished by (1) direct administration of the counties without a health officer, (2) consultation and coordination with counties having health officers, (3) coordination with other State Health Department administrations and bureaus, (4) coordination with other state and local agencies, and (5) consultation services in animal and human health to all local health departments.

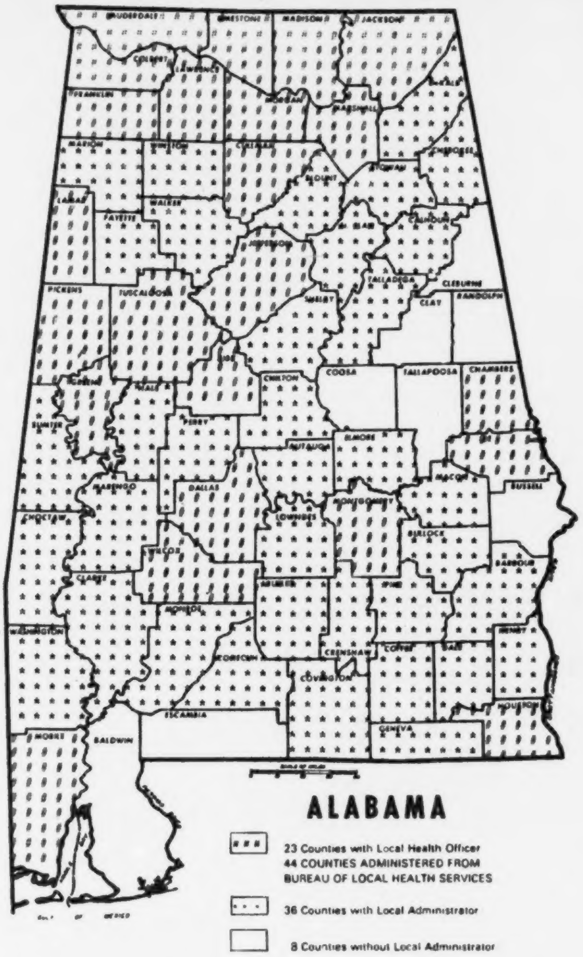
The bureau staff consists of one physician, one public health veterinarian, two adminstrators, and two secretaries.

The year began with 26 counties served by 12 local medical health officers. During the year Dr. E. F. Goldsmith retired and the bureau assumed responsibility for Baldwin, Conecuh, and Escambia Counties. Dr. O. F. Gay retired in Madison County, and Dr. Burton Shook was appointed Health Officer after having served as Deputy Health Officer in that county. At year's end the Bureau of Local Health Services was directly responsible for 44 local health departments.

Of the 41 counties without a health officer, 34 began the year with a local administrator. During 1979 the administrator in Walker and Winston counties retired and a new administrator was appointed to Walker, Winston, and Fayette counties. An acting administrator was appointed in Etowah County after the death of the previous administrator. An acting administrator was appointed for Clarke and Washington counties and another for Choctaw to replace the retiring administrator who had served in all three counties. At the end of the year, 21 administrators were serving 36 counties. Eight counties remained without local administrators.

Much of the effort of the Bureau of Local Health Services is directed to administrative concerns in the health departments without health officers. Personnel supervision of over forty local health departments is a constant challenge—finding and keeping qualified staff and assigning them where they can be most effective. The bureau has upgraded the quality of personnel under its supervision. Some employees in key positions have been terminated and others hired who are proving their greater productivity. Consultation and training have improved the performance of many other employees.

The bureau has made progress in a new system for evaluating county programs in those local departments supervised by an administrator. The system is designed to provide the local department and the bureau with organized, detailed information regarding the status of individual public health programs.


ALABAMA
23 Counties with Local Health Officer
44 COUNTIES ADMINISTERED FROM BUREAU OF LOCAL HEALTH SERVICES
36 Counties with Local Administrator
8 Counties without Local Administrator

In conjunction with program evaluation, the bureau has developed a system to identify approximate program cost. The system is designed to produce a program budget. It is based upon projected information and utilized as a planning instrument.

The bureau has increasingly coordinated efforts with other bureaus and divisions to increase delivery of servics and to improve efficiency.

The veterinary public health program is mainly involved with rabies control. Rabies in animals totaled 73 in 1979. Guidelines were completed outlining legal protocol to be used in impounding animals that have bitten human beings. Epizootic control has advanced to the degree that immediate professional and academic coordination in a massive rabies exposure accomplished in an expeditious manner the vaccination of exposed persons and the quarantine of exposed animals and premises. In 1979 the appointment of rabies inspectors in all counties has been achieved for the first time in many years.

The local health departments are funded by local money as required by law. This is supplemented by state funds and federal 314d and MCH funds. A total of $4,172,104 is distributed to the local health departments on a formula basis from state and federal funds. This sum added to local support, plus reimbursement for services from third party payors, makes up the revenues available to carry on public health programs. Fiscal management requires the Bureau of Local Health Services' administrators to develop or review local budgets, to maintain a commitment from local governing bodies or encourage them to allocate sufficient funds, and to seek out and expand other sources of financial support.

1979 ACTIVITIES	VITAL STATISTICS	IMMUNIZATION	WELL CHILD MEDICAL CLINICS	WELL CHILD SCREENING CLINICS	WIC	HEALTH EDUCATION	NURSING TRAINEE	DENTAL CARE	MATERNITY MEDICAL CARE	MATERNITY NURSING CARE	FAMILY PLANNING	TB	VENEREAL DISEASE	HYPERTENSION	BLOOD PRESSURE SCREENING	CANCER DETECTION	HOME HEALTH CARE	FOOD AND WATER INSPECTION	MILK INSPECTION	SOLID WASTE	VECTOR CONTROL	SEWAGE DISPOSAL INSPECTION	JAIL INSPECTION	RABIES CONTROL	CHILD CARE FACILITY INSPECTION	EPIDEMIOLOGY SURVEILLANCE	OTHER PROGRAMS
DISTRICT I																											
*COLBERT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
FRANKLIN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
LAUDERDALE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DISTRICT II																											
BIBB	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	
GREENE	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X		X	X	X	X	X	
LAMAR	X	X		X	X	X		X	X	X	X	X	X			X	X	X	X	X		X	X	X	X	X	
PICKENS	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X		X	X	X	X	X	
*TUSCALOOSA	X	X	X	X	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	
DISTRICT XI																											
CULLMAN	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X		X	X	X	X	X	
LAWRENCE	X	X		X	X	X					X	X	X				X	X	X	X		X	X	X	X	X	
LIMESTONE	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X		X	X	X		X	
*MORGAN	X	X	X	X	X	X	X		X	X	X	X	X				X	X	X	X		X	X	X	X	X	
AUTAUGA	X	X	X	X	X	X	X		X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	
BALDWIN	X	X		X	X	X				X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	
BARBOUR	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
BLOUNT	X	X		X	X	X			X	X	X	X			X	X	X	X	X	X		X	X	X	X		
BULLOCK	X	X	X	X		X	X	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	
BUTLER	X	X	X	X	X	X			X	X	X	X	X		X		X	X	X	X		X	X	X	X	X	
CALHOUN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
CHAMBERS	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
CHEROKEE	X	X	X		X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
CHILTON	X	X	X	X	X	X			X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	
CHOCTAW	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CLARKE	X	X		X	X	X				X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
CLAY	X	X			X						X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
CLEBURNE	X	X		X	X	X		X			X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
COFFEE	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CONECUH	X	X	X	X	X	X			X	X	X	X	X		X	X	X	X	X	X		X	X	X	X	X	
COOSA	X	X		X	X						X	X				X	X	X	X	X	X	X	X	X	X		
COVINGTON	X	X		X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
CRENSHAW	X	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
DALE	X	X			X	X		X			X	X	X		X		X	X	X	X	X	X	X	X	X	X	
DALLAS	X	X		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
DEKALB	X	X		X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
ELMORE	X	X	X	X	X	X	X		X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	
ESCAMBIA	X	X			X	X				X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		
ETOWAH	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
FAYETTE	X	X		X	X					X	X	X	X		X	X	X	X	X	X	X	X	X	X	X		
GENEVA	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
HALE	X	X	X	X	X	X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
HENRY	X	X		X	X	X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
HOUSTON	X	X	X	X	X	X	X		X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
JACKSON	X	X	X	X	X	X	X		X	X	X	X			X	X	X	X	X	X		X	X	X	X	X	
JEFFERSON	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LEE	X	X	X	X	X	X			X	X	X	X	X			X	X	X	X			X	X	X	X	X	
LOWNDES	X	X		X		X			X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
MACON	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MADISON	X	X		X		X	X	X	X	X		X	X				X	X	X	X	X	X	X	X			
MARENGO	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MARION	X	X		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
MARSHALL	X	X	X	X	X	X	X		X	X	X	X			X	X	X	X	X	X		X	X	X	X	X	
MOBILE	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MONROE	X	X		X	X	X			X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
MONTGOMERY	X	X	X	X	X	X	X		X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
PERRY	X	X		X	X	X			X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	
PIKE	X	X	X	X	X	X					X	X	X		X		X	X	X	X	X	X	X	X	X	X	
RANDOLPH	X	X		X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
RUSSELL	X	X	X	X	X				X	X	X	X	X	X		X	X	X	X	X			X	X	X		
ST. CLAIR	X	X		X	X	X					X	X			X	X	X	X	X	X	X	X	X	X	X	X	
SHELBY	X	X		X	X	X			X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
SUMTER	X	X			X				X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	
TALLADEGA	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
TALLAPOOSA	X	X		X	X						X	X				X	X	X	X	X	X	X	X	X	X		
WALKER	X	X		X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
WASHINGTON	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	
WILCOX	X	X		X	X	X				X	X	X	X			X	X	X	X			X	X	X	X	X	
WINSTON	X	X		X	X						X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	

BUREAU OF MATERNAL AND CHILD HEALTH AND FAMILY PLANNING

The mission of the Bureau of Maternal and Child Health/ Family Planning is to improve the health of women and children in Alabama. Two long-range goals related to this mission are the reduction of infant mortality and the reduction of unwanted teenage pregnancies. During 1979 many of the bureau's services and activities were performed in order to achieve progress toward these goals.

While considerable improvement has taken place over the last three years (Table 1), Alabama still finds itself with one of the higher infant mortality rates in the country (Table 2). All available information indicates that another 300 to 500 infants per year could survive and nearly that many could be saved from becoming permanently handicapped if current preventative measures and medical treatments were extended and accessible to all women and infants in Alabama. Table 3 illustrates the excess number of infant deaths in each county in Alabama, assuming that Alabama's infant mortality rate was among the best instead of among the worst states.

TABLE 1

INFANT MORTALITY IN ALABAMA

1976			1978			1979 Projected		
Number Births	Number Deaths	Rate	Number Births	Number Deaths	Rate	Number Births	Number Deaths	Rate
57,895	1,156	20.0	60,108	970	16.1	58,000	777	13.4

TABLE 2
COMPARATIVE INFANT MORTALITY RATES FOR SELECTED STATES
1976-1978

	YEAR		
STATE	1976	1977	1978
South Carolina	19.3	17.8	18.5
Louisiana	17.7	18.0	17.8
Mississippi	20.8	17.3	17.1
North Carolina	18.0	15.6	16.3
New York*	16.1	14.6	16.3
Alaska	15.0	13.4	16.3
Alabama	20.0	17.0	16.1
Tennessee	17.4	16.9	16.1

Rate per 1,000 live births.
*New York State

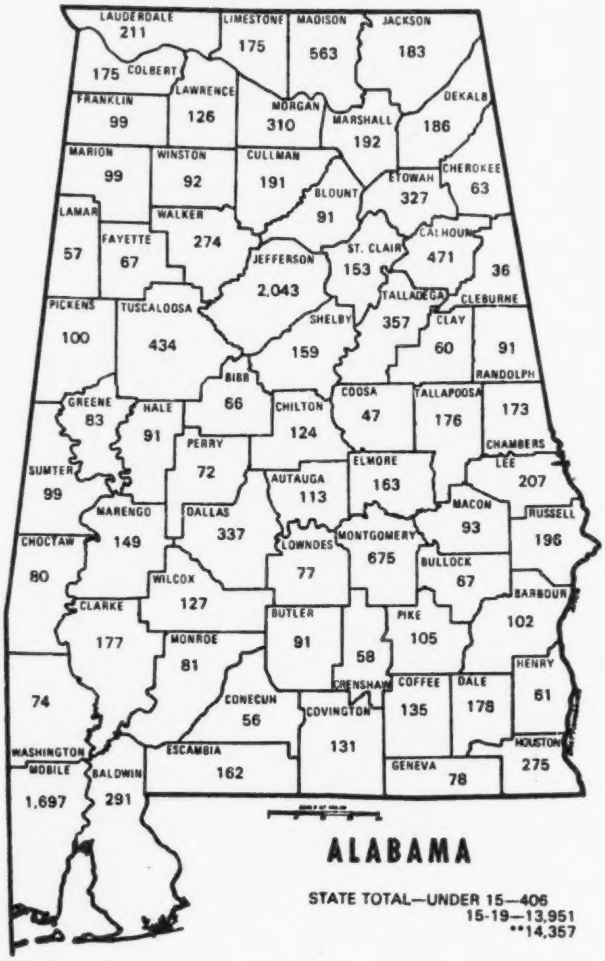
TABLE 3
1978 INFANT MORTALITY

County	No. of Births/ IMR*	No. of Deaths	Expected No. of Deaths**	Excess No. of Deaths**
HSA I				
Colbert	698/17.2	12	7	5
Cullman	809/16.1	13	8	5
Franklin	431/20.9	9	4	5
Jackson	780/14.1	11	8	3
Lauderdale	1,024/7.8	8	10	-2
Lawrence	475/18.9	9	5	4
Limestone	657/7.6	5	6	-1
Madison	2,731/15.7	43	27	16
Marion	382/31.4	12	4	8
Marshall	864/4.6	4	9	-5
Morgan	1,317/11.4	15	13	2
Winston	350/8.6	3	4	-1
TOTAL	10,518/13.7	144	105	39
HSA II				
Bibb	227/30.8	7	2	5
Fayette	229/8.7	2	2	0
Greene	209/23.9	5	2	3
Hale	316/15.8	5	3	2
Lamar	234/12.8	3	2	1
Pickens	360/13.9	5	4	1
Tuscaloosa	1,959/13.3	26	20	6
TOTAL	3,534/15.0	53	35	18
HSA III				
Blount	447/17.9	8	4	4
Chilton	484/8.3	4	5	-1
Jefferson	10,353/13.6	141	104	37
St. Clair	597/3.4	2	6	-4
Shelby	976/14.3	14	10	4
Walker	1,017/19.7	20	10	10
TOTAL	13,874/13.6	189	139	50
HSA IV				
Calhoun	1,904/11.6	22	19	3
Chambers	585/30.8	18	6	12
Cherokee	231/30.3	7	2	5
Clay	230/21.7	5	2	3
Cleburne	166/6.0	1	2	-1
Coosa	146/20.5	3	1	2
DeKalb	744/18.8	14	7	7
Etowah	1,473/14.3	21	15	6
Randolph	327/12.2	4	3	1
Talladega	1,279/24.2	31	13	18
Tallapoosa	582/12.0	7	6	1
TOTAL	7,667/17.3	133	76	57
HSA V				
Autauga	472/25.4	12	5	7
Barbour	422/4.7	2	4	-2
Bullock	197/25.4	5	2	3
Butler	367/30.0	11	4	7
Coffee	573/19.2	11	6	5
Covington	527/19.0	10	5	5
Crenshaw	194/15.5	3	2	1
Dale	801/12.5	10	8	2
Elmore	637/20.4	13	6	7
Geneva	326/18.4	6	3	3
Henry	251/15.9	4	3	1
Houston	1,223/14.7	18	12	6
Lee	1,060/14.2	15	11	4
Lowndes	283/42.4	12	3	9
Macon	418/35.9	15	4	11
Montgomery	3,072/19.9	61	31	30
Pike	391/20.5	8	4	4
Russell	821/18.3	15	8	7
TOTAL	12,035/19.2	231	121	110
HSA VI				
Baldwin	1.205/11.6	14	12	2
Choctaw	263/15.2	4	3	1
Clarke	509/29.5	15	5	10
Conecuh	295/3.4	1	3	-2
Dallas	1,053/19.0	20	11	9
Escambia	604/16.6	106	4	
Marengo	439/31.9	14	4	10
Mobile	6,555/17.2	113	66	47
Monroe	407/7.4	3	4	-1
Perry	228/30.7	7	2	5
Sumter	306/9.8	3	3	0
Washington	253/15.8	4	3	1
Wilcox	364/33.0	12	4	8
TOTAL	12,480/17.6	220	126	94
STATE	60,108/16.1	970	601	367

*Based on infant mortality per 1,000 live births.
**Based on infant mortality rate of 10 per 1,000 live births.

In 1977, 23% of all live births in Alabama were to mothers 19 years of age and under. Of these, approximately 3% were under 15 years of age. Figure 1 shows the number of births to teenagers in each county in 1977. The often tragic consequences of adolescent pregnancy and births to teenagers are seen in poor health outcomes for mother and child, and sociological, economic, and educational disruptions which often permanently affect the future of adolescent parents. In an attempt to reduce unwanted and inappropriate pregnancy during 1979 the Bureau of Maternal and Child Health/Family Planning provided counseling and contraceptive services to 70,055 persons; 29% of these were teenagers (Table 4). An additional 100,807 persons benefitted from family planning educational programs in community-based settings. Tables 5 and 6 provide a summary of services in the family planning program in 1979.

TOTAL RESIDENT LIVE BIRTHS TO MOTHERS
19 YEARS OF AGE AND UNDER BY COUNTY, 1977**


LAUDERDALE 211
LIMESTONE 175
MADISON 563
JACKSON 183
COLBERT 175
LAWRENCE 126
FRANKLIN 99
MORGAN 310
MARSHALL 192
DEKALB 186
MARION 99
WINSTON 92
CULLMAN 191
BLOUNT 91
ETOWAH 327
CHEROKEE 63
LAMAR 57
FAYETTE 67
WALKER 274
JEFFERSON 2,043
ST. CLAIR 153
CALHOUN 471
36
CLEBURNE
PICKENS 100
TUSCALOOSA 434
SHELBY 159
TALLADEGA 357
CLAY 60
91 RANDOLPH
BIBB 66
GREENE 83
HALE 91
CHILTON 124
COOSA 47
TALLAPOOSA 176
173 CHAMBERS
PERRY 72
SUMTER 99
ELMORE 163
LEE 207
AUTAUGA 113
MARENGO 149
DALLAS 337
MACON 93
RUSSELL 196
CHOCTAW 80
LOWNDES 77
MONTGOMERY 675
BULLOCK 67
WILCOX 127
BARBOUR 102
CLARKE 177
BUTLER 91
PIKE 105
58 CRENSHAW
MONROE 81
HENRY 61
74
CONECUH 56
COFFEE 135
DALE 178
COVINGTON 131
WASHINGTON
HOUSTON 275
MOBILE 1,697
BALDWIN 291
ESCAMBIA 162
GENEVA 78
ALABAMA

STATE TOTAL—UNDER 15—406
15-19—13,951
**14,357

TABLE 4

Program	Patients Served New	Continuing	Total
Area 1	3,707	7,371	11,078
Area 2	1,216	3,216	4,432
Area 3	5,952	14,668	20,620
Area 4	2,002	4,691	6,693
Area 5	4,835	9,369	14,204
Area 6	4,162	8,866	13,028
Statewide	21,874	48,181	70,055

TABLE 5
STATEWIDE FAMILY PLANNING PROJECT
CY 1979

1. Unduplicated patients served:	
New	21,874
Continuing	48,181
Total	70,055
2. Total patient clinic visits	202,351
3. Teenagers served:	
New	10,873
Continuing	9,131
Total	20,004
4. Teenage groups:	
Under 18	8,649
18-19	11,355
5. Patient continuation rate:	
All patients	55.2%
Teenagers	62.1%
6. Medical services provided patients:	
Pap tests	58,878
Pelvic exams	70,845
Breast exams	59,048
Blood tests	57,332
Urinalysis	65,371
VDRL	57,860
GC	66,830
Blood Pressure	197,317
Sickle Cell tests	11,413
Other	172,419
7. Referrals for medical problems	
8. Patients served who were below 150% of the CSA Poverty Level	67,253

9. Medicaid patients represent 16.6% of the total caseload. This is a 10% increase from CY 1978.
10. Total clinicians visits 100,275
11. 49.7% of all new patients admitted were teens.
12. 39.6% of all new patients admitted had used no method of contraception prior to enrollment in our clinic programs.
13. Family planning patients averaged 2.88 visits per patient during CY 1979.

TABLE 6
STATEWIDE FAMILY PLANNING PROJECT PATIENT CHARACTERISTICS
CY 1979

Education
8 and under = 10.0%
9-11 yrs. = 36.7%
12 yrs. = 38.1%
13 + yrs. = 15.0%
Unknown = 0.2%

Parity
0 = 31.4%
1 = 29.7%
2 = 18.3%
3 = 7.8%
4 = 3.6%
5+ = 3.8%
Unknown = 5.4%

Race
White = 40.4%
Non-white = 59.6%

Contraceptive Method
Oral = 76.3%
IUD = 8.1%
Diaphragm = 1.9%
Condom = 1.6%
Foam = 7.6%
Sterilization = 1.3%
Other = 3.2%

Age Groups
14-17 = 12.6%
18-19 = 16.4%
20-24 = 37.4%
25-29 = 19.4%
30-34 = 8.4%
35+ = 5.8%

During 1979 the Bureau of Maternal and Child Health/Family Planning used predominantly federal funds from both formula and competitive grants to educate and train maternal, child health, and family planning clinic staff in modern medical techniques; provided additional staff for local health departments to increase availability of services to meet local needs; provided equipment for health departments to increase availability of services to meet local needs; provided equipment for health departments and hospitals for use in medical care; collected and analyzed data for a more accurate definition of goals and objectives based on an evaluation of charges; and finally encouraged more cooperation between the various public and private agencies, physicians, etc., which as a unified effort began to make an impact on improving the health of women and children in Alabama.

Resource Utilization

The Bureau of Maternal and Child Health received its funds from three sources, two federal and one state. A total of $5,615,000 came from Title V of the Social Security Act and was allocated to the state on a formula basis to achieve general improvement in maternal and child health services.

Title X of the Public Health Service Act provided $3,488,152 to support family planning services in local health departments across the state. Finally, $200,000 was allocated to the Bureau of Maternal and Child Health from the Special Education Trust Fund for the purpose of a statewide educational effort for physicians and nurses working in the area of maternal and child health. Additional funds are earned from third party collections for the provision of medical services.

The largest portion of the maternal and child health or Title V Social Security Act funding is used to support a federally mandated program of projects.

These are maternal and infant care projects in Jefferson, Mobile, Macon, Bullock and Russell counties. These projects encompass prenatal care, postpartum care, infant care to one year of age and hospital delivery for a small percentage of high risk patients. These funds were originally granted to the local health departments in the case of Jefferson and Mobile counties and to Tuskegee Institute for administration and service delivery, but since 1975 administration has been the responsibility of the Bureau of Maternal and Child Health/Family Planning.

Children and Youth Project (C&Y)—The C&Y Project was granted to the University of Alabama in Birmingham in 1966 with funds administered by the Bureau of Maternal and Child Health/Family Planning since 1975. This funding supported the outpatient department of Children's Hospital which provided indigent care services to children and youth of Jefferson County.

Newborn intensive care unit projects—The University of South Alabama and the University of Alabama in Birmingham each received $100,000 to support a small fraction of the cost of newborn intensive care for indigent patients provided by each facility.

Mental retardation projects—The Center for Development and Learning Disorders in Birmingham and Children's Center of Montgomery received funding for the support of services for children who are mentally retarded.

Dental projects—The bureau administered funds for dental projects in Mobile and Jefferson counties to serve indigent children.

Family Planning Demonstration Projects—This project, located in North Alabama, HSA Area 1, provided family planning services for indigent women. It serves as a demonstration family planning project for the State of Alabama.

In addition to the above, the federal government awarded Alabama three grants described below. These projects have a duration of either four or five years.

The Improved Pregnancy Outcome Project (IPO) is a demonstration project designed to improve pregnancy outcome and to lower infant mortality. A total of $225,000 was used to support a project which provided prenatal, postpartum and infant care to indigent women and children in Tuscaloosa, Bibb, Hale, Pickens, Lamar, Greene and Fayette counties. This care was provided in conjunction with the West Alabama District Health Department and the University of Alabama Department of Community Health Sciences. A total of $175,000 in IPO monies was used statewide to gather data about maternal and child health, to perform various statewide educational projects, and to provide staff for regional, maternal and child health consulting teams.

The Southeast Alabama Improved Child Health Project was implemented by federal mandate in Russell, Macon, Bullock, Pike, Henry and Barbour counties. The Southwest Alabama ICH Project is to be implemented in 1980 in Conecuh, Perry, Sumter, Marengo, Wilcox and Monroe counties. The mandate is for demonstration projects which reflect the most effective means of reducing infant mortality and unwanted teenage pregnancies. This funding provides for expanded family planning services, education and outreach services, prenatal services, some delivery services for high risk mothers, and postpartum and infant care.

In addition to the funding already mentioned, approximately $1,000,000 supported maternal and child health services through the local health departments, especially those not involved in the special projects mentioned above. In 1979 many counties in the state expanded or began prenatal and well-child clinics funded from this part of the Title V grant. Approximately $3,500,000 in Title X funds supported family planning services statewide.

Hospital Equipment Program—The Bureau of Maternal and Child Health allocated funds last year to help supply Alabama's hospitals with modern equipment to provide appropriate care for sick pregnant women and their newborn infants. This allotment of equipment was based on a recommendation by the State Perinatal Advisory Committee.

Area Health Department Consulting Program—In order to maintain and improve maternal and child health services in local health departments, the Bureau of Maternal and Child Health employed area consulting and coordinating teams consisting of an administrator, health educator, nutritionist, social worker and nurse. There are six such teams (one per each health service area), but all were not fully staffed at the close of 1979. A priority for 1980 will be to staff each team with all disciplines.

High Risk Outpatient Referral Program—The Bureau of Maternal and Child Health/Family Planning last year developed referral mechanisms for local health department maternity patients who could not afford the sophisticated care that complications in pregnancy demand. Centers for referral were identified, and it is anticipated that full statewide implementation will be possible within the first two months of 1980.

Perinatal Nursing and Physician Education Program—The Bureau of Maternal and Child Health contracted with the regional perinatal centers to provide educational programs to the smaller and more rural hospitals in their area.

The tasks of the collection and analysis of the specific hospital and maternal and infant transport data were continued in 1979 in an attempt to define on a continual basis those factors which may result in improved maternal and infant survival. During the last two years Clinical Information Systems of the Department of Pediatrics at the University of Alabama in Birmingham has been under contract to provide a part of this information to the Bureau of Maternal and Child Health/Family Planning.

Educational Material Development—To improve the care offered by Alabama's nurses and physicians for women and children, the bureau contracted for the production of educational materials from the medical educational division at UAB.

Bureau Administration

In an effort to comply with a federal mandate in 1979 to increase productivity despite limited resources, reduce administrative costs, and establish monitoring and evaluation mechanisms for measuring the effectiveness of service delivery and management systems as well as the quality of patient care, the Bureau of Maternal and Child Health/Family Planning underwent reorganization at the state level. This reorganization combined staff of previously separated programs into divisions of general management and service areas. The bureau also initiated a management by objectives approach to planning and evaluating work output. Each division is listed below with a brief description of its area of responsibility as well as major activities during 1979.

The Division of Planning and Grants is responsible for planning and grants activities within the bureau. This includes developing and updating the state plans for maternal and child health and family planning services; searching for additional sources of funding through federal, state and private sources; preparing new and continuation applications which satisfy federal requirements for grant funds to support maternal and child health services; coordinating planning and grants activities with appropriate state and local review authorities; and preparing narrative and statistical reporting data in compliance with federal reporting requirements.

Activities were:

Developed a management by objectives approach to problem solving in the format of an annual bureau plan.

Developed two new funding sources for maternal and child health services in 1979.

Submitted all required continuation plans, narrative reports, etc., to federal and state authorities on or before the due date in order to maintain project funding.

Evaluated Maternal and Child Health/Family Planning project goals and objectives for compatibility with state and regional HSA review to facilitate project review and avoid duplication in service, resources and programs.

The Data and Analysis Division maintains and monitors the patient reporting systems for family planning, maternity and pediatrics, and provides training to all clinics concerning the functioning of these systems. Also this division satisfies the needs of the different divisions of MCH for data so that appropriate planning and reporting can be accomplished.

Activities were:

Began a statewide maternity reporting system.

Developed linkages to eliminate possible duplication between pediatric reporting and childhood immunization follow-up reporting systems.

Studied the feasibility of computerizing the patient follow-up system as well as the feasibility of implementing the pediatric reporting system on a statewide basis.

Began measures to reduce error rates in the family planning reporting system by five percent in each area.

The Division of Fiscal Management develops budgets and financial plans for the programs of the Bureau of MCH. It maintains financial systems in order to provide accurate and timely expenditure information to program management for decision making, planning and accountability of funds. It also provides maintenance of a supply system.

Activities were:

Began to develop a unified system of financial management for maternal and child health and family planning to include a sound financial plan for each county, and each region of the state based upon an annual assessment of resources and expenditures.

Continued to monitor and evaluate expenditures of all special projects in conjunction with the Division of Special Projects.

Began to develop and maintain an inhouse bookkeeping/accounting system of all bureau expenditures.

Maximized the utilization of health finance services to the bureau through liaison with that office.

Maintained the family planning fee system.

Began to design a statewide supply system for the Bureau of Maternal and Child Health/Family Planning.

The Division of Health Education's activities in the Bureau of Maternal and Child Health can be divided into five district areas: 1) increasing public awareness of the necessity for appropriate health care, 2) patient education in clinic sites, 3) community health education and local resource development, 4) school family life education, and 5) staff training and development.

Activities were:

Expanded family planning resource centers to include Maternal and Child Health educational materials and developed a systematic approach to supplying educational materials to ensure an equitable distribution.

Maintained training activities for the bureau.

Assumed liaison responsibility with the Alabama Family Planning Council during 1979.

Maintained resource capability in family life education for schools, community groups, PTA's, and health professionals statewide.

Developed the "Suggested Curriculum Guide for Family Life Education for 9th and 10th Grades" which is in its second printing.

Added an information specialist to the Division of Health Education staff which expanded the public awareness aspect of the division. Two public service announcements as well as numerous local and statewide news releases and radio and T.V. talk shows promoting Maternal and Child Health/Family Planning have been developed in order to call attention to infant mortality and teenage pregnancy.

Began several community health projects in conjunction with other community projects in planning.

Developed a county profile to assist Maternal and Child Health/Family Planning in future planning for meeting community and target population needs.

The Division of Special Projects was responsible for the administration of the following: three maternal and infant care projects, one children and youth project, two central projects, two intensive infant care projects, two mental retardation projects, the Improved Pregnancy Outcome Demonstration Service Project in the West Alabama District Health Department and the Improved Child Health Project. The administration of these projects required working with project directors and administrators to achieve project objectives and to ensure compliance with federal and state regulations and guidelines. This division was dissolved in late 1979 with responsibilities being assigned to other divisions by service or management function rather than as a special project.

The Division of Support Services is responsible for all contract negotiations and their related requirements. The relationship between the Bureau of Maternal and Child Health and the Medical Services Administration, the fiscal intermediary and providers of Title XIX services, are coordinated by this division. The purchase of major equipment items for health facilities, the negotiation for bureau related lease agreements, and the development and implementation of a high risk referral program for qualified health department maternity patients are the other areas of responsibility of this division.

Activities were:

Coordinated all activities between the bureau, Medical Services Administration (MSA) and their fiscal intermediary for all county health departments and Title V agencies (18) that are under formal contract with this bureau for the provision of prenatal services reimbursed by Title XIX-Medicaid. (Medicaid reimbursements received for the prenatal program for FY '79 totaled approximately $215,000.00.)

Increased contracts with hospitals for the provision of inpatient care for high-risk maternity patients who are indigent and have no other source of funding.

Established a high risk ambulatory referral system for indigent maternity patients in 10 hospitals across the state. During the period July 1, 1979-December 31, 1979, four of these hospitals performed 644 consultations/tests.

Maintained an ongoing inventory of major perinatal equipment purchased by the bureau and placed in hospitals through contract. New equipment purchased in 1979 totaled $78,615.00.

Maintained lease agreements for space required for the implementation of maternal and child projects during 1979.

Developed, implemented, maintained, and/or renewed all other contracts including interagency agreements, that are required to facilitate the operation of maternal and child health programs and special projects. At the end of 1979, this number was 75.

The Division of Patient Care is responsible for the coordination of clinical services at the local level. This division provides consultation for medical, nursing, nutrition and social work services in the area of family planning, pediatrics and maternity. Development, implementation, and monitoring of screening protocols as well as protocols for management of problem patients are the responsibility of this division. Consultants in nursing , nutrition, and social work act in an advisory capacity to the Patient Care Coordinator to assure that the protocols developed are sound and applicable to the various clinic settings.

Activities were:

The development of Patient Care Protocols for Pediatric, Maternity, and Family Planning Services.

The revision of the family planning record and incorporation of the record in clinic by September, 1979.

The development and approval of joint nutrition pamphlets between WIC and Maternal and Child Health/Family Planning.

The completion of a series of study guides for specialized nurse training.

The development of a standardized medical protocol for nurse practitioners working in the family planning program.

The development of a Child Health Medical Record.

The formulation of a genetic screening questionnaire.

Assisted in the recruitment of additional area team members and clinic staff.

Sponsored workshops on Personalized System of Instruction, Prenatal Inservice Education and Child Assessment.

The development of draft record audit forms for pediatric and maternity records and revising the family planning audit to become a component of the onsite Maternal and Child Health/Family Planning program patient care review.

The Division of Quality Assurance was established in 1979 in response to a federal mandate for a system of quality assurance in Title V and X funded programs. It is the major responsibility of this division to design, implement, and monitor a system of quality assurance at local, area, and state levels which can evaluate the quality of patient care, staff utilization and productivity, management systems, and support systems. As some of these systems were inadequate, the division also has responsibility for assisting in designing and implementing efficient and effective systems in all functional areas of the bureau. The division did not become fully operational until the fall of 1979.

Activities were:

Monitored the bureau planning process for compliance with federal mandates for quality assurance in Title X and Title V programs.

Developed additional clinical information systems to assure compliance with Bureau of Community Health Services standards, in fulfilling reporting requirements for the Bureau of Common Reporting Requirements, and in effectiveness of patient tracking.

Began to design a system of program and patient care review.

Provided education and training for state and regional teams in components of quality assurance during November, 1979.

Began developing from local, regional, state and federal needs and goals, a set of operating manuals which contain at a minimum, program and patient care protocols, policy and procedures, job descriptions, organizational charts, staff orientation protocols, the quality assurance system, BCRR reporting requirements, and data system instructions and analyses.

Developed an evaluation instrument for use by division coordinators to monitor progress in achieving objectives of each division.

Developed an evaluation instrument and process for use by county, area, and state level staff in the assessment of progress in achieving objectives of each county plan.

Within the Bureau of Maternal and Child Health, our goal is to attain the national average for infant mortality by 1985. It is estimatd that by then the rate will be about 12 deaths per thousand live births. Overall, the goal is to reduce infant mortality rates in Alabama to the best attained anywhere. At this time, rates between 8 and 10 per thousand live births are achieved in some of our states as well as some European countries.

There are many activities underway to reduce infant mortality in Alabama. These efforts are coming from both within and outside the State Department of Public Health. It is expected that the various programs now underway will continue contributing to reductions in infant mortality over the next several years until our goal is achieved.

BUREAU OF PUBLIC HEALTH NURSING

Support Division

During 1979 the Bureau of Public Health Nursing placed overall emphasis on program objectives and accountability for services. Each nursing consultant is assisting the nursing divisions of county health departments to formulate objectives that can be measured and that will serve to clarify needs and accomplishments. Program and personnel evaluations are made as appropriate and as requested by health officers or administrative staff. Subsequent recommendations are shared with the involved staff and become a part of the accountability process.

There are 457 nurses employed within the structure of the state merit system; 404 are working in the county health departments and 53 are employed at the state level. More than 75 percent of those employed by the state are assigned to county services. The employment and discharge rate has continued to be about the same as for the previous year.

Employed

54 replacements, full-time
31 new positions, full-time
1 replacement, temporary
86 total nurses employed

Separations

57 resignations
6 retirements
3 dismissals
1 layoff
67 total separations

Positions abolished or not filled

67 separations
55 replacements
12 positions not filled

Only 31 new positions were established this year as compared with 44 for 1978. This has happened in spite of increasing health needs throughout the state. Also only 19 promotions have occurred compared with 32 for 1978. In addition there were 3 dismissals and 1 layoff.

It is encouraging to note that the number of nurses who are prepared at the baccalaureate or higher level has increased from 11 percent to 16.5 percent. Nurses at this level have public health nursing principles and administration included in their undergraduate education and are therefore better prepared to function in the community setting.

In addition to those employed under the state merit system, Mobile County employs 32 nurses and Jefferson County employs 40 nurses.

The bureau participated with the Division of Nursing, HEW, in the Biennial Census of nurses employed in public health and/or community health nursing. This study requires time and detail compilations, but it is used to determine nursing personnel needs throughout the United States at the various classification levels and is also a tool for developing staffing patterns.

The nursing consultants have made over 600 visits to local health departments. The number is less than last year since one of the consultants resigned in August, and we have been unable to recruit a replacement. The 14 counties served by this consultant have been visited on a "call basis" by the remaining 4 consultants.

The program for providing student experiences in public health nursing is growing due to the increased enrollments in the baccalaureate programs and to the establishment of two new educational programs. We are attempting to refine the contracts between the local health departments and the schools of nursing so that there is a clear understanding of the responsibilities of both parties. It is imperative that sufficient time be allowed for planning and that faculty be available when students are in the county health departments.

Members of the professional staff continue to serve on the Staff Development Committee and are active in every phase of the nursing program. There has been close coordination of the Nursing Bureau with other bureaus and divisions providing personal health services, educational programs, and administrative direction.

Professional staff continue to serve as liaison with other agencies and organizations both at the local and national level.

Division of Planning, Training, and Evaluation

The Division of Planning, Training, and Evaluation provided continuing educational experiences for public health nurses through staff development programs, seminars, and workshops during 1979. Mini-workshops were utilized this year to meet the needs of new nursing personnel in the area of tuberculosis nursing and teaching self-breast examinations. These workshops were developed from a needs assessment questionnaire sent out to public health nurses throughout the state.

Orientation sessions were conducted for 36 public health nursing personnel on the state level for 1979. Public health nursing consultants continued to provide orientation to nurses on the local level.

The nursing reference library is being systematized and catalogued for easier access to the reference material. A number of new references have been added. Local public health nurses and student nurses have utilized this library to increase their knowledge and skills in nursing.

Consultations to individuals as well as schools of nursing and local health units have been made available to improve student experiences in public health.

Pamphlets, manuals, and audiovisual displays have been developed and made available to nurses on the local level to be used in health fairs and for career days in schools of nursing.

Every effort will be made to continue the high quality of educational experiences for public health nurses during 1980.

Staff Development Programs

First Session: January-February, 1979
Topic: "The Process of Patient Teaching"

Date	Place	Attendance (PHNs)
1/17/79	Talladega	16
1/18/79	Auburn	27
1/19/79	Dothan	30
1/26/79	Prattville	28
1/29/79	Decatur	25
1/30/79	Tuscumbia	32
2/2/79	Troy	26
2/12/79	Gadsden	24
2/13/79	Gadsden	23
2/22/79	Monroeville	23
2/23/79	Demopolis	20
2/26/79	Tuscaloosa	36

Second Session: April-May, 1979
Topic: "Practical Genetic Counseling"

Date	Place	Attendance (PHNs)
4/18/79	Talladega	20
4/19/79	Auburn	20
4/20/79	Dothan	21
4/27/79	Prattville	30
4/30/79	Decatur	41
5/1/79	Tuscumbia	22
5/4/79	Troy	18
5/14/79	Gadsden	18
5/15/79	Gadsden	9
5/24/79	Monroeville	25
5/25/79	Demopolis	16
5/28/79	Tuscaloosa	18

Third Session: August-November, 1979
Topic: "Spinal Cord Injury"

Date	Place	Attendance (PHNs)
8/22/79	Sylacauga	16
8/23/79	Auburn	17
8/24/79	Dothan	33
9/24/79	Decatur	13
9/25/79	Tuscumbia	27
9/28/79	Prattville	21
10/5/79	Troy	24
10/18/79	Monroeville	26
10/19/79	Demopolis	20
10/29/79	Tuscaloosa	28
11/5/79	Gadsden	13
11/6/79	Gadsden	15

Health Service Aide Workshops

First Session: April-May, 1979
Topic: "Oral Hygiene for the Elderly and/or Home Care Patient" and "Communication and Health Teaching"

Date	Place	Attendance (Aides)
4/4/79	Anniston	11
4/5/79	Decatur	36
4/6/79	Dothan	7
4/18/79	Tuscaloosa	9
4/25/79	Centre	14
4/26/79	Selma	9
5/16/79	Tuskegee	13
5/18/79	Troy	31
5/29/79	Grove Hill	22

Second Session: October-November, 1979
Topic: "Prevention of Burns"

Date	Place	Attendance (Aides)
10/1/79	Selma	9
10/2/79	Grove Hill	14
10/3/79	Anniston	11
10/11/79	Russellville	18
10/17/79	Tuscaloosa	8
10/19/79	Troy	14
10/31/79	Etowah	16
11/2/79	Dothan	19
11/21/79	Tuskegee	20

Bureau of Public Health Nursing Sponsored Workshops

Self-Breast Examination Mini-workshops

Date	Place	Attendance
3/9/79	Bullock County	7 PHNs; 2 physicians
6/13/79	Butler County	7 PHNs; 1 aide
6/18/79	Walker County	8 PHNs; 1 aide
6/20/79	Calhoun County	12 PHNs
6/22/79	Montgomery County	13 PHNs
7/10-11/79	Jefferson County	37 PHNs
7/18/79	St. Clair County	9 PHNs

7/30/79	Marengo County	7 PHNs
12/10/79	Montgomery County	11 PHNs
12/12/79	Calhoun County	18 PHNs
Total	10 Workshops	79 PHNs; 2 physicians; 2 aides

Seminar on Tuberculosis

Date	Place	Attendance
5/29/79	Tuscumbia	26 PHNs
8/30/79	Montgomery	16 PHNs
10/2/79	Sylacauga	21 PHNs
11/8/79	Monroeville	24 PHNs
11/19/79	Troy	23 PHNs
11/27/79	Demopolis	17 PHNs
Total	6 Seminars	147 PHNs

Home Health Management Workshop

Date	Place	Attendance
9/24-25/79	Auburn	18 PHNs; 12 secretaries
9/26-27/79	Troy	18 PHNs; 17 secretaries
10/11-12/79	Evergreen	19 PHNs; 11 secretaries
11/7-8/79	Tuscaloosa	17 PHNs; 13 secretaries
1/14-15/79	Decatur	25 PHNs; 13 secretaries
Total	5 Workshops	97 PHNs; 66 secretaries

The Public Health Nurse as a Manager/Supervisor Workshop

Date	Place	Attendance
12/3-5/79	Holiday Inn, Clanton, AL	61 PHNs

Programs and Workshops Coordinated or Public Health Nursing

Seminar on Psychotropic Drugs
    Sponsored with Alabama Department of Mental Health

School Health Nursing Workshop
    University of Kentucky, University of Alabama School of Nursing

Genetic and Birth Defects Seminar
    University of South Alabama

Genetics in Child Health
    University of Alabama

Medicaid Child Health Assessment
    University of Alabama, Medical Services Administration

Division of Home Health Services

The Division of Home Health Services focused its attention on refining and perfecting its computerized magnetic tape billing and payment programs in the Medicare program during the early part of 1979. Presently both of these programs are completely operational and timeliness in submission of bills for payment and in receipt of payment for services rendered has been reduced to minimal time. In many instances payment is made by the fiscal intermediary within 5 to 15 days after billings have been submitted from this office.

Negotiations between the Division of Home Health Services and Office of Direct Reimbursement, Health Care Financing Administration have resulted in the division's participation in a pilot Administrative Demonstration Program. This program places responsibility on division personnel for making covered services determinations on all Medicare plans of care and deletes the ongoing medical edit reviews performed by the Office of Direct Reimbursement. Participation in this program has placed added responsibilities on the small division professional staff, but in turn it has greatly improved and enhanced the cash flow to the local subunits from the Office of Direct Reimbursement (ODR). This program became operational October 1, 1979.

Programming has been accomplished for initial starts of care to be submitted to the Office of Direct Reimbursement via magnetic tape. This additional computerization programming will reduce personnel time at the local, division, data processing and ODR levels spent in reviewing, processing and submitting starts of care. ODR's reply to these starts of care will also be returned via magnetic tape. When a telecommunications system is available to us this magnetic tape start of care and reply program will be switched to it. The telecommunications system will be even more timely than the magnetic tape program.

The overall home care program declined somewhat during 1979. We feel this was the result of closer screenings of patients admitted to service. The most marked decrease was in the Disease and Disability program.

Fiscal year 1979 unduplicated patients served and visits by discipline were as follows:

HOME HEALTH

	Unduplicated Patients	Visits						
		Skilled Nursing	Physical Therapy	Speech Therapy	Medical Social Services	Home Health Aide	Orderly	Total Visits
MEDICARE	6,943	70,113	3,404	678		48,729	1,387	124,311
MEDICAID From each Co.'s Billing Cards	1,851	23,747				28,481	21	52,249
Disease & Disability From A-3	6,275	19,036	100			36,641		55,776
STATE TOTALS	15,069	112,896	3,504	678		113,851	1,408	232,336

Presently the Division of Home Health Services has 58 subunits. (Request has been submitted for separate provider numbers for Cullman and Limestone counties.)

Physical Therapy

1 Staff	serving 1 county
15 Individuals	serving 21 counties
3 Rehab Centers	serving 3 counties
1 Hospital	serving 2 counties
1 P.T. and Sports Rehab Service	serving 1 county
1 County Health Dept.	serving 1 other county
	29

Speech Therapy

5 Individuals	serving 9 counties
2 Rehab Centers	serving 2 counties
1 S. T. Associate	serving 1 county
1 Co. Speech & Hearing Clinic	serving 1 county
1 Univ. Dept. of Speech	serving 1 county
	14

Occupational Therapy

2 Rehab Centers	serving 2 counties

Medical Social Services

1 Individual	serving 1 county

Orderly

37 Individuals	serving 32 counties

Aides

(all subunits provide aide services)

145 Staff Aides	serving 63 counties
11 Contract Aides	serving 8 counties

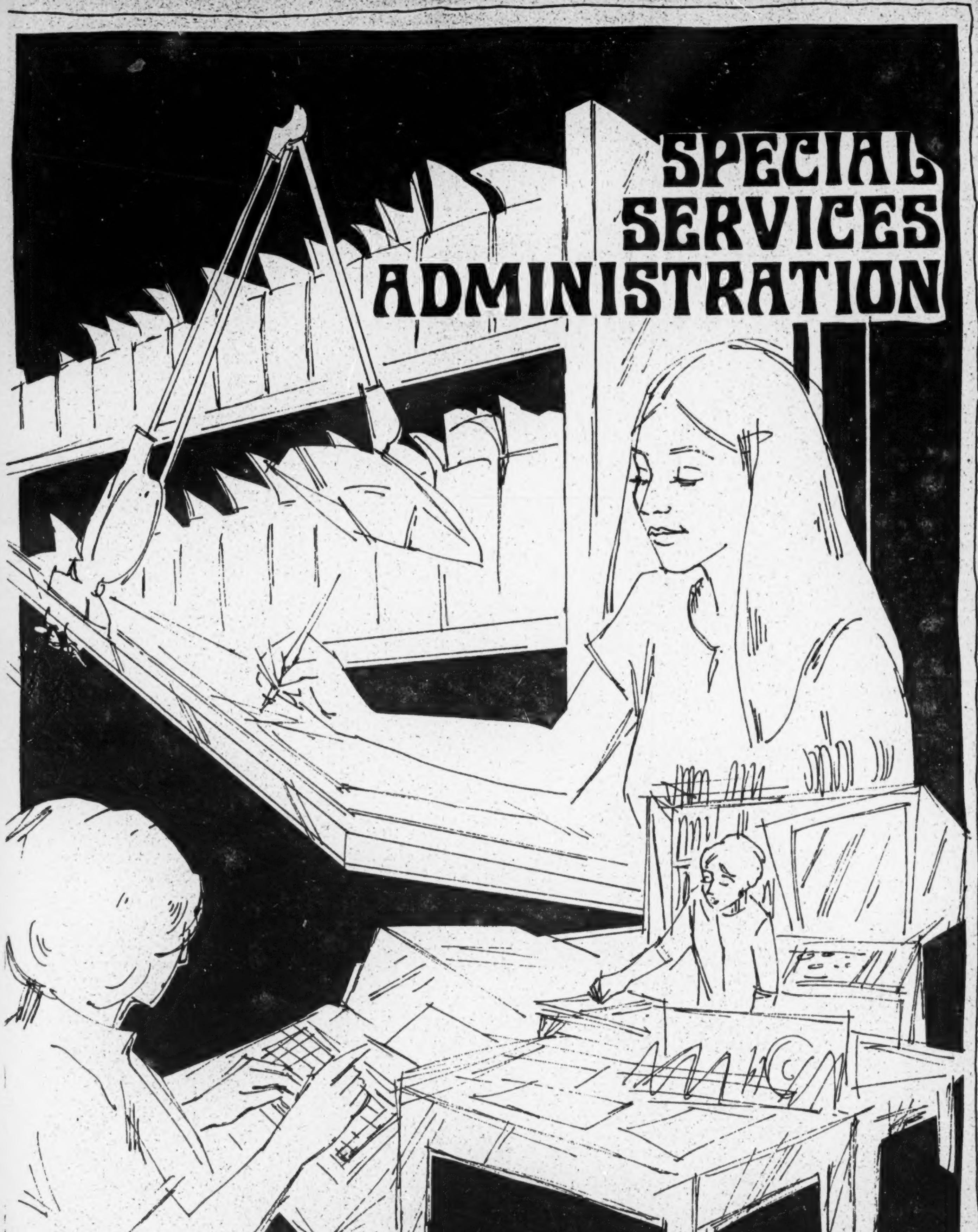
Three subunits, Covington, Geneva and Sumter counties, were operational in grant programs to enrich and expand home health services. Macon and Wilcox counties have been approved for funding but have not become operational because of inability to employ staff.

Home Health Management workshops were held in Auburn, Troy, Greenville, Tuscaloosa and Decatur during the year. Home health coordinating nurses and secretaries assigned home health duties attended from all subunits. Each workshop was of two days' duration.

Consultative and agency evaluation services continue to be provided to nonprofit and visiting nurse association agencies particpating in the Medicaid home care program. This service was provided by 15 agencies, including two agency subunits.

As in the past quality care with cost containment has been a top priority in the Division of Home Health Services.

SPECIAL SERVICES ADMINISTRATION



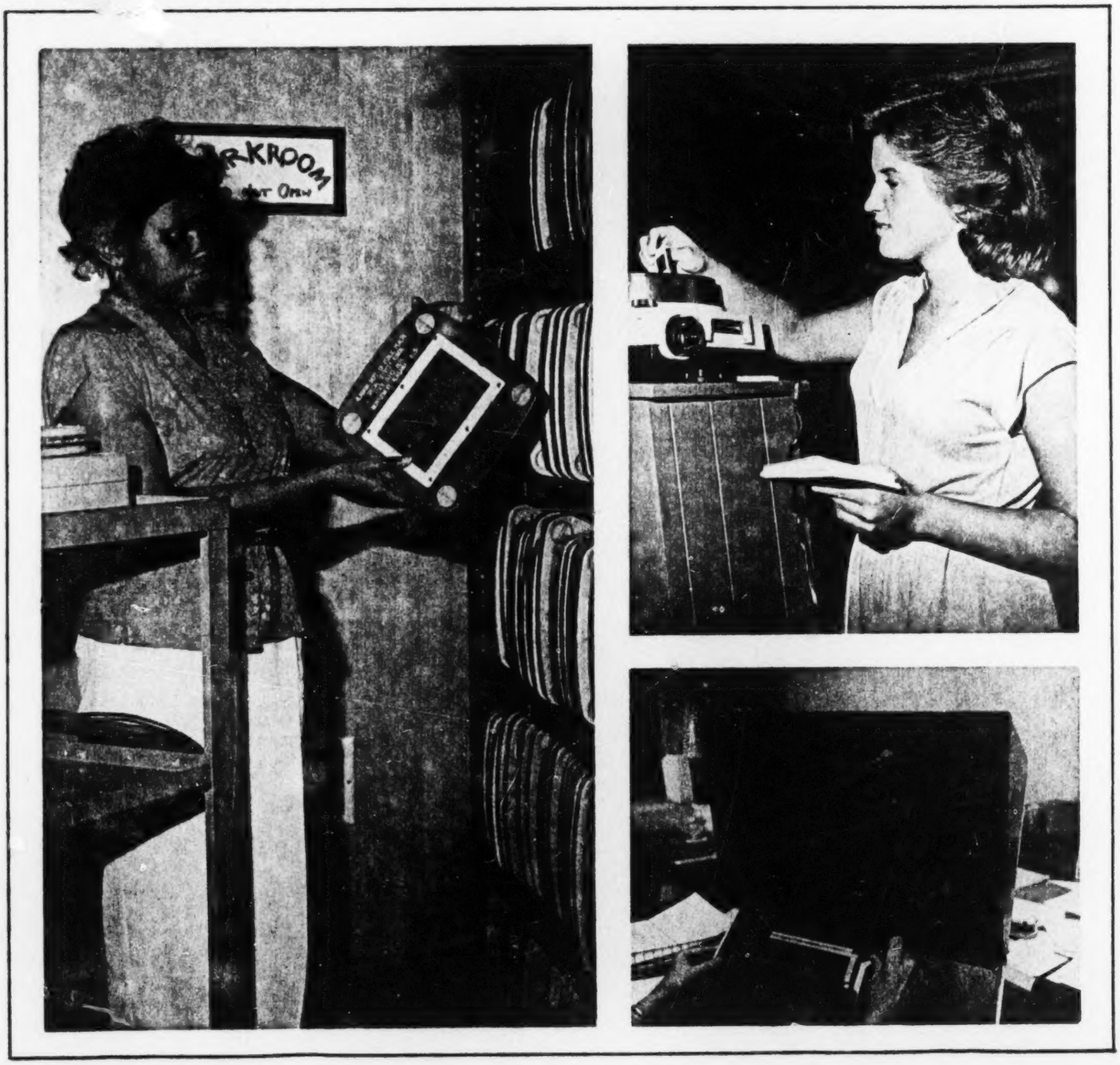
The organizational structure of Special Services Administration underwent a major change during 1979 with three bureaus being created from the previous framework of five divisions. These are the Bureau of Health Data Systems, the Bureau of Vital Statistics, and the Bureau of Primary Prevention which absorbed the divisions of Graphic Communication and Narcotics and Dangerous Drugs.

A major breakthrough was the installation of video terminals providing direct data access for several units of the health department. The Bureau of Health Data Systems implemented the use of CRTs in the Bureau of Vital Statistics, the Division of Finance, and the Division of Home Health Services. For the first time in over a quarter of a century, at the end of a calendar year the Bureau of Vital Statistics was current in filling requests for service mainly due to this computerization.

A great deal of time was expended in transferring all of our printing capacities to the Division of Printing and Publications, Department of Finance. Print shop personnel and equipment were lost by this consolidation effort.

The Bureau of Primary Prevention continues to broaden its programs. Two grants were applied for and received during the year. The major thrust and goal of this unit is to strengthen the department toward first level prevention of disease through health education and health information.

The Special Services Adminstration office continues its dual administrative role as supervisor of three bureaus and as state registrar and director of the Bureau of Vital Statistics.



BUREAU OF HEALTH DATA SYSTEMS

The year of 1979 started as we had anticipated, full of challenges and opportunities. The biggest single challenge was experienced in the Data Entry Division. The massive volume of data to be entered from the statewide WIC Program has required major concern for this division. The number of recipients on the program has grown at a very rapid rate. Printing of food vouchers and other reporting requirements generate over 3,000,000 print lines of data per month.

Video terminals were installed in several areas to give the ability to inquire into master data files. A terminal was installed in the Division of Finance. Along with the ability to inquire into the Health Department finance data files, there is also the capacity to inquire into the financial data files of the State Comptroller.

Vital Statistics was another area to install video terminals. Birth index data files for the years from 1936 through 1978 are used for searching for birth certificates. Early in 1980 the other 2 million index records will be added to the on-line file to give index searching capacity for all years of birth records.

The billing systems for the Bureau of Public Health Nursing was completed with the installation of a video terminal for inquiry into the patient file, billing file and the payment status file.

A maternity patient system was developed for the Bureau of Maternal and Child Health. The categories of optometrist and pharmacist were added to the Health Manpower Reporting System.

Several areas were provided more meaningful data through the use of a Statistical Analysis System package. The divisions of Venereal Disese Control and Vital Statistics received data in better and more usable form through the use of this system.

Programming for several new applications has been started but will not be completed until next year. An on-line system for Radiological Inspection is one of these systems. It will have file inquiry and update capacity. The planning for an Immunization Tracking System is another system that was begun.

BUREAU OF PRIMARY PREVENTION

Change was the keynote for Primary Prevention in 1979—new organization, new director, new activities.

Reorganization was the inevitable result of the shift from in-house printing to state central printing. Because the Division of Graphic Communication has worked so closely with the Division of Primary Prevention, it was logical that the organizational structure reflect this relationship. Consequently Primary Prevention was elevated to a bureau with four divisions—Graphic Communication, Health Education, Health Information, and Narcotics and Dangerous Drugs.

At this time no significant changes have occurred in the Division of Narcotics and Dangerous Drugs. The housing and supervision of Health Education and Health Information remained in the Bureau of Primary Prevention. Typesetters, photographers and artists were moved into the Divison of Graphic Communication.

Major components for program changes were cooperating with Consumer Product Safety Commission, initiating the Cooperative Education Program and applying for federally funded projects.

Under the auspices of Consumer Product Safety Commission, emphasis on health education was renewed early in the year. The cooperative relationship resulted in funds for much needed health education and accident prevention projects.

The Cooperative Education Program provides additonal manpower to the bureau while the students gain experience and knowledge by alternating working and going to college. They work one quarter and go to school the next. Presently five students—an artist and four journalists—are participating in the program.

Applications for two federal grants were submitted in 1979. One which the Office of Highway and Traffic Safety awarded is for promoting use of child restraints in automobiles. The Center for Disease Control grant provides funds for risk reduction related to smoking. The programs which these funds make possible will be initiated in 1980.

Division of Graphic Communication

The Division of Graphic Communication continued to furnish printing services for the health department through September 30th. On October 1, 1979, the printing capabilities were consolidated with Printing and Publications, a division of the Finance Department. At this time the services of Graphic Communication changed. Typesetting, Illustrative Arts, and Photographic Services were relocated to the Division of Graphic Communication.

The division continues to coordinate the health department printing with Printing and Publications. All plates and negatives are returned for filing. The health department is invoiced monthly for printing services through the Division of Graphic Communication. These invoices are approved and a copy is sent to the division from which the printing request came.

Photographic services were provided to all bureaus and divisions. Black and white photos were used for annual reports of TB, Vital Statistics, and other bureaus. Photographs were used for booklets and pamphlets, as well as other department activites. Color photographs ranging in size from 4" X 5" to 16" X 20" were made.

Color slides were processed and mounted for training services, presentations and Dr. Myers' report to ALPHA and the State Medical Association.

Typesetting assisted the department with 3 calendars, 118 business cards, 118 certificates, 183 charts and graphs, 8 covers, 60 brochures, 26 books, 225 forms, 11 letterheads, 10 envelopes, 43 slides, 16 posters and 2 transparencies. This was in addition to small jobs such as form number changes.

Illustrative Arts produced a total of 5,102 pieces of work which consisted of 1,170 miscellaneous paste-ups and lettering, 473 forms, 89 signs, 95 graphs, 234 certificates, 438 covers, 491 illustrations, 165 posters, 98 slides, 178 business cards, 580 transparencies, 223 charts, 272 tablets, 25 letterheads, 27 name tags, 51 name plates, 371 corrections and headlines, 98 programs, pamphlets, newsletters and quarterly reports, 1 annual report (150 pages), 1 environmental health book, 1 TB annual report (72 pages), 2 calendars, 1 film catalog, 12 *Alabama's Health* (96 pages), 6 exhibits.

Divisions of Health Education/Information

With additional staff, health education and information services increased. To promote interest in health and to alert the public of health and safety dangers, the divisions produced information cards giving brief synopses of disease symptoms, health care and health problems. Thirty-five subjects were discussed in this summary form. There were eight new brochures written which gave more extensive information.

Alabama's Health, the department's news magazine, was released each month. A variety of health related subjects was covered. In cooperating with the Consumer Product Safety Commission (CPSC) a consumer tip was included each month.

Feature articles on health and safety subjects were submitted to newspapers and to industry newsletters.

More than 150 news releases were distributed. Many of these were on the recall of products which CPSC had designated as hazardous. As a follow-up to the recalls, surveys were conducted to assure that hair dryers containing asbestos and certain dangerous toys had been removed from the shelves of retail outlets. Managers were interviewed to determine if they were aware of the recall and to assess their attitude toward compliance.

Eight safety promotion meetings reached over 600 people. The subjects of these meetings dealt with fire, poison, lawn mowers, falls, flammable liquids, fireworks, glass and playground safety. The programs were directed toward children and the elderly as well as those responsible for their care.

Burn prevention was the subject of nine programs conducted for home health service aides and public health nurses. In the two-and-a-half hour programs, the dangers of fireplaces, space heaters, electrical cords, flammable liquids and easily ignited fabric were pointed out. Films were used to demonstrate methods of escaping from burning buildings. These programs reached 129 aides and 38 nurses.

Displays have served as a means of advocating accident prevention and good health. A health exhibit was prepared for a Montgomery mall. Bicycle safety was promoted at the annual Traffic Safety Conference in Montgomery. Bicycle, stairway and general safety were urged in the displays used in several locations, including the South Alabama State Fair, Montgomery. In addition, the division staff manned a booth at the fair to discuss safety and health with those who stopped by.

A more extensive use of the electronic media was fostered this year. Public service announcements (PSA's) were sent to all radio and television stations. Slides accompanied the PSA's for television. Subjects included flammable fabrics, bicycle safety, water safety, fireworks safety, bathroom accidents.

To aid reporters in covering public health news, this office has scheduled interviews with appropriate health department officials.

The division cooperated with Alabama State University in a one-day health fair where some 80 people received physical examinations. The Montgomery County Health Department provided professional staff for the project. Indications of malignancy—two Class II and one Class III—were detected. One positive for syphilis and several cases of sickle cell were discovered.

In the preparation of quality health materials, editing, proofing and consulting services have been provided other units of the department. Many divisions in the Environmental Health Administration have been revising regulations to update the information and to standardize the format. Staff of the Division of Information edited those on food inspection, water, sanitation and hazardous wastes. The new Environmental Health Administration Manual has been edited and prepared for printing.

Editorial assistance was provided for the annual reports of the divisions of Vital Statistics and Tuberculosis Control. Other books included the Family Planning Fee Manual and the WIC Venders' Guide and Manual. The editing and proof reading of copy for the Southern Branch history was completed early in the year. The production of shorter health materials, e.g., brochures, graphs, programs, forms, articles, required the expertise of the staff.

The preparing of two slide programs to inform those interested in health activities was a cooperative effort of script writers and photographers. The personnel program was designed for training of new public health employees. The Sumter County slide series on home health nursing services was for promotional purposes.

The reference librarian assisted public health professionals in finding information in the department library and from other sources. Requests through interlibrary loan totaled 119 in 1979. Sixty-three new titles on medicine or public health were added to the library. These include the bound volumes of journals. The 325,114 pieces of printed material were distributed in response to 38,676 requests.

The 70 new health films received in 1979 bring the total of films and filmstrips available for loan to 659. In response to 5,157 requests, 4,364 films were sent out. In conjunction with revising and updating the film catalog, the format was changed to loose-leaf binding to facilitate future revisions.

The audiovisual technician maintains and distributes equipment to aid in presenting health programs. The 650 requests included 252 for projectors, 12 projector tables, 38 for screens, 26 for cassette recorders and 140 for extension cords. There were six requests for exhibit equipment, 23 for the public address system and 56 for other aids for programs. Miscellaneous equipment, such as take-up reels, trays, lenses, were used 96 times. The audiovisual technician manned the equipment at four meetings. The divisions of Health Education and Health Information provided a variety of services to health professionals and the general public. The Priority of Health was emphasized in all activities.

Division of Narcotics and Dangerous Drugs

The Division of Narcotics and Dangerous Drugs continues to concentrate its main effort in the drug abuse law enforcement field with special attention given to registrants and professional health-care groups such as physicians, dentists, veterinarians, pharmacists, nurses, hospitals and teaching institutions.

The division is comprised of three effective field agents, with one additional agent being assignd to the Department of Public Safety.

Frequently when registrants are convicted in criminal cases they are sentenced by the court to serve their sentences in public owned and operated institutions such as mental institutions, etc. If a registrant is convicted of drug abuse and is penalized through administrative action, this usually takes the form of revoking his license to practice his profession or restricting the professional's privileges to utilize controlled substances in his practice of medicine, dentistry, pharmacy, etc. These penalties are usually imposed by the certifying board concerned (Board of Medical Examiners if a physician is involved, Board of Dental Examiners if a dentist is involved, etc.). Several criminal cases and board cases have been brought against licensed nurses discovered to be diverting controlled drugs for their own use or for someone other than a patient.

The division publishes in newspapers with statewide coverage, annually as required by law, the complete list of controlled substances with all the additions, deletions and alterations that have occurred throughout the year. The division also furnishes the Office of Prosecution Services the list of controlled substances on an annual basis and the changes throughout the year as they occur. These are further distributed to each district attorney in the state. Prosecutors receive this list automatically, and it is further distributed to other agencies and parties upon request.

The use of electronic listening and recording equipment has been effective in preparing criminal and administrative cases and is extremely important in the accuracy of reporting; however, this capability has markedly diminished during the past year because of the obsolescence and unreliability of the present equipment.

The division obtains from the Pharmacy Board invoices of all controlled drugs that are shipped into Alabama. These invoices are screened and quite often give us an early lead as to possible or probable points of drug diversion.

In its mission of drug abuse suppression, this division has in the past referred the vast majority of its cases to the interested governing board; however, this year the division has assumed the stance of better balance in preparing its cases for administrative or criminal action. Cases submitted to the boards for administrative action are prepared for criminal prosecution in the event the board is unable to act.

Attached is a breakdown of some of the actions of the division during 1979.

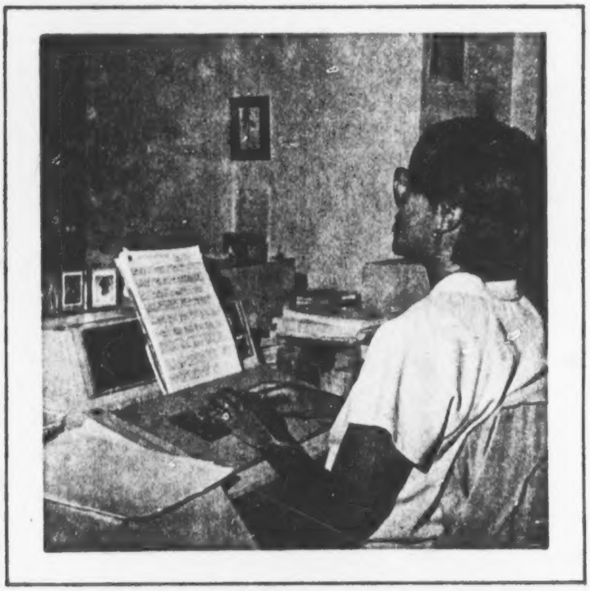
STATISTICAL INFORMATION FOR YEAR ENDING December 31, 1979

PHYSICIANS	
Investigated	125
DENTISTS	
Investigated	25
VETERINARIANS	
Investigated	4
DRUGSTORES	
Prescription Files Checked	709
HOSPITALS	
Records Checked	4
Drug Security Checked	4
CRIMINAL	
Arrests (Felony)	19
Felony Counts (approx.)	43
Arrests (Misdemeanor)	1

BUREAU OF VITAL STATISTICS

Improving the quality of service rendered to the public continued to have a high priority during 1979.

To expedite the handling of requests received by mail for birth certificates, a computer terminal was installed during the latter part of the year in the mail section. With the terminal keyboard access to the birth index file for the years 1936-1978 can be obtained at any time during the day. The use of the terminal has significantly reduced the time required to make a record search to 8-10 seconds. In addition, it has been a major factor in reducing the total time required to service a request.



The microfilming of death records from 1908 through the present was completed during the year. The completion of this project enabled the bureau to provide a "back-up" system. In the event a catastrophe were to destroy the original records or make them otherwise unusable, copies of the original records could still be issued from microfilm. The microfilm copies of these records are stored in a fireproof vault in another city.

All 1976 birth records were filmed and placed into service therby enabling the microfilm section to issue copies of birth records from 1908 through 1976. In addition, microfilm records of all delayed birth records, adoptions, legitimation and affidavits were updated to include records received during 1979.

As a maintenance precaution, the microfilm section began the project of rebinding vital records volumes which had become worn due to use. The completion of this project is scheduled for the end of 1980.

A major responsibility of the microfilm section is the issuance of certified copies from microfilm. During 1979, the section made 81,077 copies or records, or about 36 percent of the 225,579 certified copies issued.

The bureau placed great emphasis on attaining the most complete and accurate reporting of vital events. Due to an active field program and an in-service education program, continued improvement in vital registration has occurred.

The field representative for the bureau traveled more than 12,000 miles and made 132 personal visits to persons involved in the registration of vital events. Visits were made to 54 local registrars, 41 physicians, 15 funeral directors, 12 hospitals and two coroners. In addition visits to district attorneys and law enforcement agencies were made seeking assistance with cases of delinquent registration.

Although the field representative's travel was more limited during 1979 than for the previous year, several physicians were reported to the State Board of Health for failing to promptly file certificates of birth and death. In one case, legal action was brought against a physician.

In-service education received primary emphasis during the year. In this regard, two one-day in-service programs were conducted by the staff for registrars, coroners and medical records personnel. The focus of these seminars encouraged personnel to seek solutions to mutual problems. In addition, the field representative was requested to make several presentations in hospitals to medical records personnel.

As a further training aid, the bureau added another 35mm sound-slide presentation to its collection. The most recent, "How to Complete a Certificate of Death," was prepared for coroners and medical examiners. The four slide presentations are available for loan.

Due to a law passed by the 1979 legislature, it was necessary to drop the birth notification program effective August 1, 1979.

The contract for the vital statistics component of the Cooperative Health Statistics System was renewed for an additional three years. Under this contract the Bureau of Vital Statistics will promote a voluntary coalition among data users at all levels of government for the development of a current and accurate health data base.

In addition to the annual vital statistics report, the bureau produced two computer-generated publications to provide data users with detailed information on natality and mortality. These reports will become a regular part of the bureau's annual publications.

Adminstrative Services

The Bureau of Vital Statistics is unlike other state organizations in that it does not receive a legislative appropriation. Financial resources for the operation of the bureau must come from fees charged for services provided. Fees received for the issuance of certified copies, the primary source of revenue, amounted to $648,817 during 1979. Of this amount, $135,988 or about 21 percent was collected at the service counter.

The bureau's service counter served about 37,700 customers during the year and issued more than 50,300 certified copies, or about 22 percent of all copies issued.

Requests for birth certificates outnumbered death requests at the service counter by about 5.6 to 1. The average number of copies issued per birth request was 1.1 compared to 2.9 for death certificate requests. These figures for copies issued per request remained stable from the previous year.

The 2,808 adoptions prepared during 1979 increased by 126 from the previous year. New birth records were prepared for 2,235 adopted persons born in Alabama and for 573 out-of-state born children who were adopted in Alabama.

Under Alabama law an adopted minor, upon reaching the age of majority, by making an appointment with the state registrar may view his or her original record of birth upon proper identification. During 1979, the state registrar opened sealed records of birth for 54 adopted persons.

A slight reduction in the number of children legitimated occurred. During 1979, the Bureau processed 1,913 legitimations—a decrease of 51 from the previous year. In addition to those processed, about 3,000 court-ordered legitimations for which no fee has been received are on file. Of these, 411 were received during 1979.

Preparing birth amendments is a major undertaking of the bureau each year. During 1979, amendments were prepared for 10,448 certificates of birth. In addition, 4,479 delayed certificates of birth were recorded.

Mail received by the bureau decreased slightly from the previous year. During 1979, the 201,288 pieces of mail received represent a daily average of about 822 pieces per working day.

Births

The lowest birth rate in the history of Alabama was recorded during 1979. The estimated crude birth rate of 15.6 per thousand population is about 3.1 percent lower than the 16.1 rate recorded in 1978.

The estimated 58,995 live births occurring to Alabama residents in 1979 continued the decreasing trend in the birth rate. This number is about 1,100 fewer than the previous year.

Deaths

Preliminary data indicate that general mortality declined during the year. The 34,046 deaths occurring resulted in a mortality rate of 9.0 per thousand population.

The ranking of the ten leading causes of death remained unchanged from the previous year.

The leading cause of death was diseases of the heart which accounted for 11,584 deaths, or about one-third of all deaths. A slight increase from the previous year occurred for heart diseases mortality. Heart diseases has been the leading cause of death in Alabama for more than 50 years.

Malignant neoplasms, as the second leading cause of death, accounted for 6,544 deaths. Although a slight numerical increase in cancer deaths occurred, the mortality rate of 172.8 per 100,000 population is less than the previous year. Cancer has been the second leading cause since 1966.

Cerebrovascular diseases was the third leading cause of death in 1979. This cause claimed the lives of 3,637 Alabamians, or about 10.7 percent of all deaths.

Mortality declined as a result of accidental death. The 2,279 deaths due this cause are about 200 fewer than the previous year. As the fourth leading cause of death the mortality rate was 60.2.

Infant and Fetal Mortality

Alabama continued to improve its record in the number of deaths occurring to infants. During 1979 provisional statistics indicate 805 infant deaths occurred. This number, about 200 fewer than the previous year, resulted in an infant mortality rate of 13.6 per thousand live births. Unless unforseen circumstances arise, the infant mortality rate should be only slightly higher than the U.S. rate.

Improvement in pregnancy outcomes was also visible in the fetal mortality ratio. For 1979 the 678 fetal deaths were 97 fewer than the previous year and resulted in a mortality ratio of 11.5 per thousand live births. Current estimates are that both the number and rate are well below 1978 statistics.

Maternal Mortality

During the year seven mothers died of complications of childbirth, labor and the puerperium. Compared to the 13 maternal deaths for the previous year this is a substantial improvement. As a result of the seven deaths the maternal death rate was 1.2 per 10,000 live births. One of these deaths was to a white mother and six were to nonwhite mothers.

Marriages and Divorces

The number of marriages performed decreased by about 200. The 47,500 marriages resulted in a marriage rate of 12.5 per thousand population and continued the rate's downward trend which began in the early part of the decade.

Divorces continued to increase during the year. About 1,500 more Alabamians terminated marriages than the year before. The 26,500 divorces occurring resulted in a divorce rate of 7.0 per thousand population—the highest rate ever recorded in the state.

Population

Alabama's midyear population for 1979 was 3,786,400 based on estimates made by the University of Alabama's Center for Business and Economic Research. About three-fourths of the state's population was white. There are more females than males in the state. The sex ratio is 106 females per 100 males.

Life Expectancy

At birth Alabamians can expect to live 69 years. The longest life expectancy of about 76 years is enjoyed by white females. By comparison, life expectancy for white males is about nine years less.

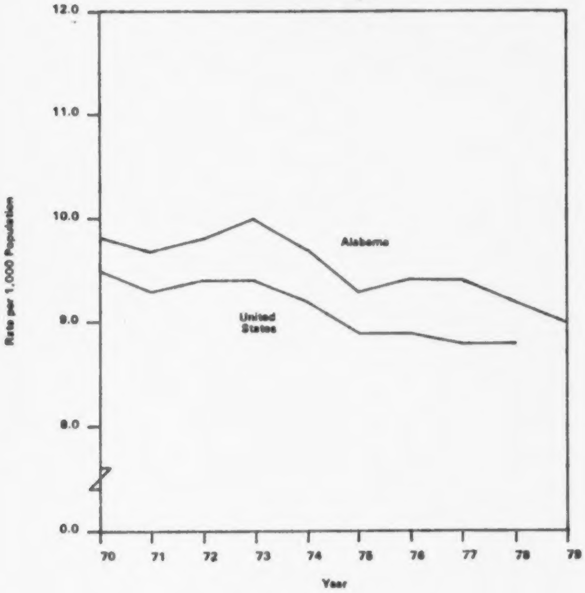
For nonwhite females, the 68 years of life expectancy at birth compares with the 61 years nonwhite males can expect.

LEADING CAUSES OF DEATH ALABAMA, 1978 and 1979

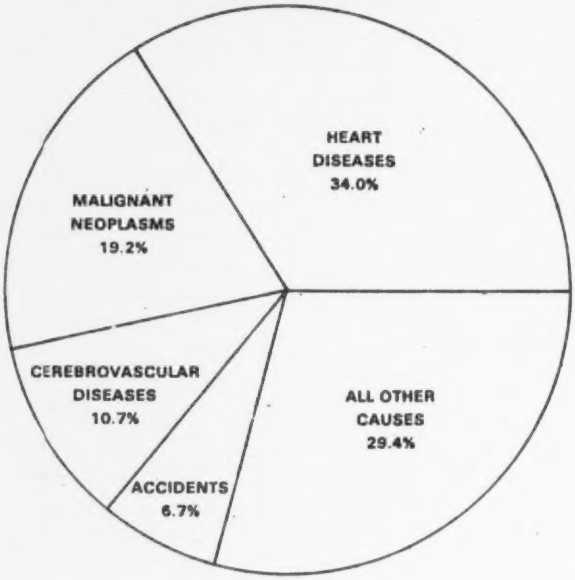
1979				1978		
RANK	NUMBER	RATE	CAUSE OF DEATH	RANK	NUMBER	RATE
—	34,046	899.2	TOTAL ALL CAUSES	—	34,489	921.7
1	11,584	305.9	Diseases of the Heart	1	11,326	302.7
2	6,544	172.8	Malignant Neoplasms	2	6,507	173.9
3	3,637	96.1	Cerebrovascular Diseases	3	3,835	102.5
4	2,279	60.2	Accidents	4	2,480	66.3
5	724	19.1	Diseases of the Arteries	6	832	22.2
6	689	18.2	Pneumonia and Influenza	5	966	25.8
7	600	15.9	Diabetes Mellitus	7	644	17.2
8	495	13.1	Homicide	8	516	13.8
9	424	11.2	Certain Conditions Originating in the Perinatal Period	9	442	11.8
10	411	10.9	Suicide	10	399	9.9
—	6,659	—	All Other Causes	—	6,542	—

Rate per 100,000 population.

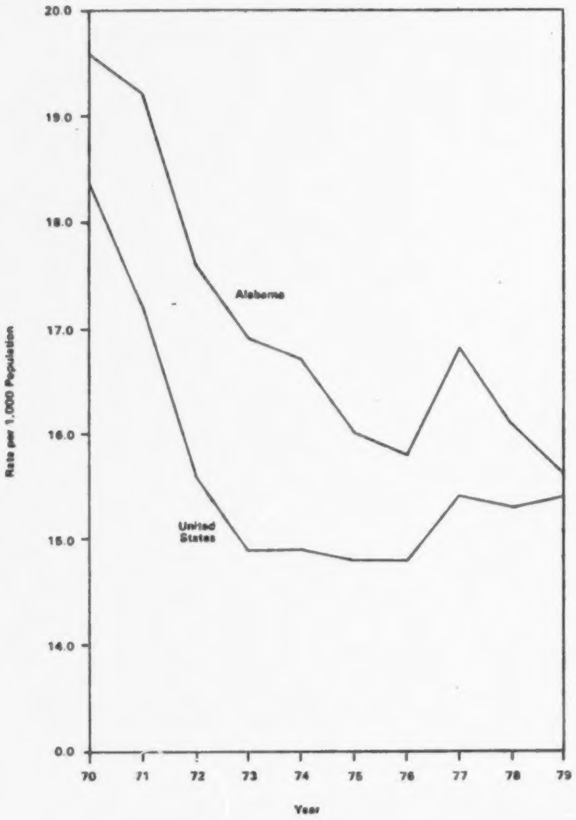
MORTALITY RATES
ALABAMA AND UNITED STATES
1970-1979



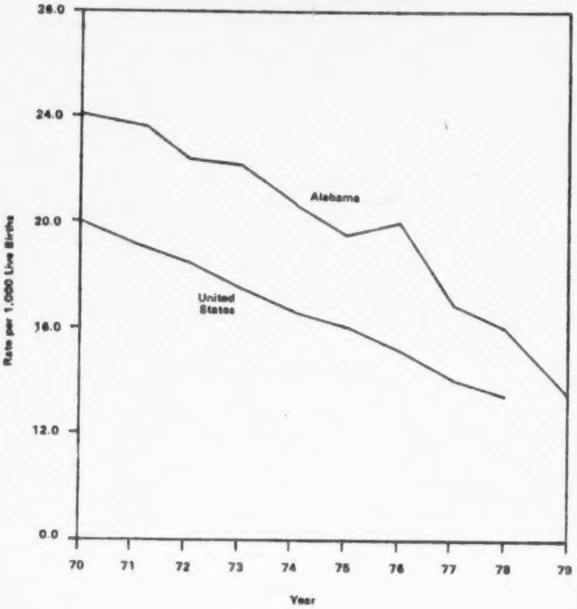
PERCENTAGE DISTRIBUTION OF
MAJOR CAUSES OF DEATH
ALABAMA, 1979



RESIDENT BIRTH RATES
ALABAMA AND UNITED STATES
1970-1979



INFANT MORTALITY RATES
ALABAMA AND UNITED STATES
1970-1979



ALABAMA DEPARTMENT OF PUBLIC HEALTH
PERSONAL HEALTH SERVICES ADMINISTRATION
BUREAU OF LOCAL HEALTH SERVICES
JOYCE GENDZWILL, M.D., DIRECTOR

STATE OFFICE BUILDING, ROOM 344
MONTGOMERY, ALABAMA 36130
TELEPHONE: 832-3186

LOCAL HEALTH OFFICERS & HEALTH SERVICES ADMINISTRATORS

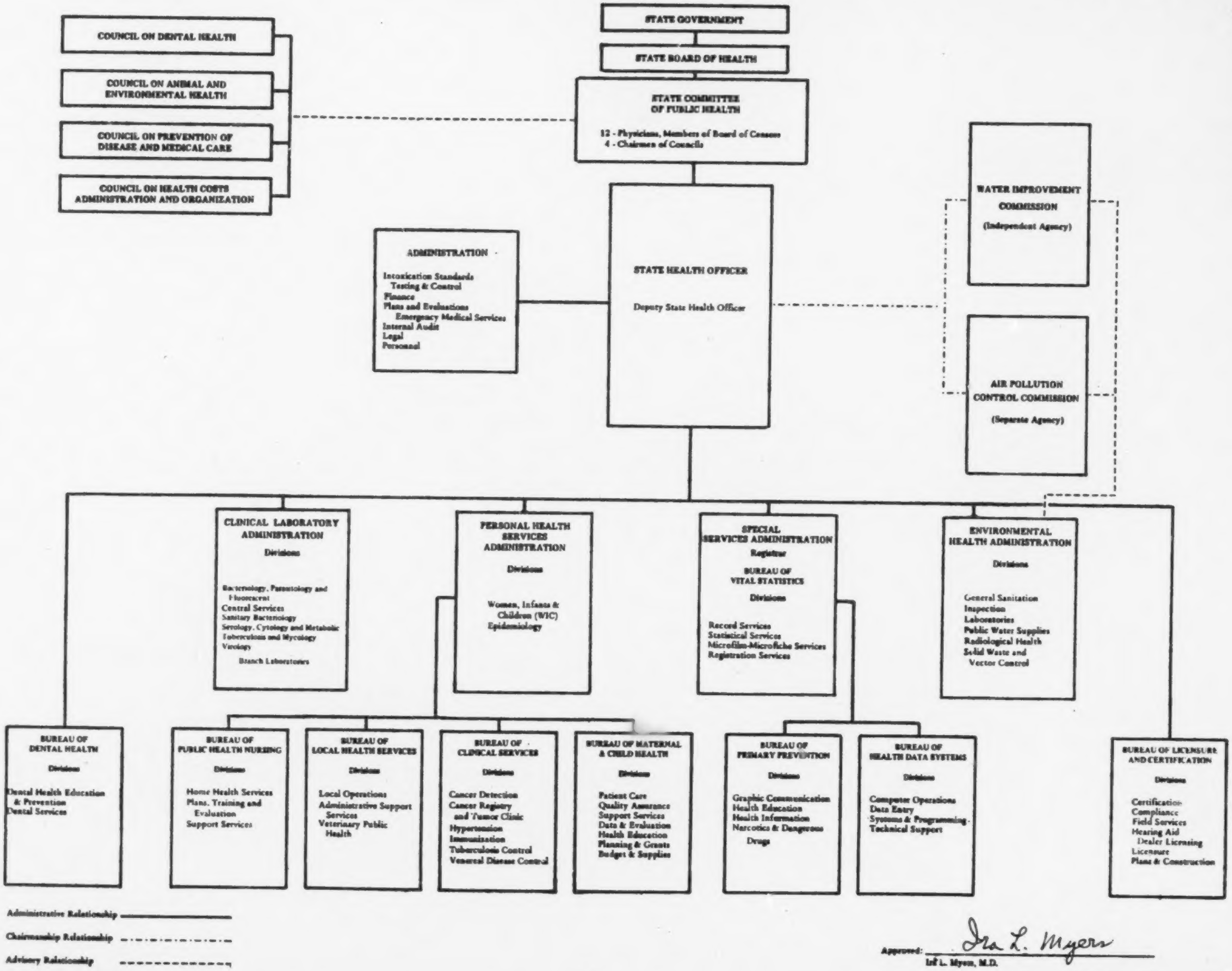
JULY 1, 1980

County/District	Name	Title	Tel. No.	Mailing Address
I. NORTHWEST AL REGIONAL HEALTH DEPT.			383-1231	Box 407, Tuscumbia 35674
Colbert	H. C. Woodworth, M.D.	DHO	383-0746	Box 30, Tuscumbia 35674
Franklin	H. C. Woodworth, M.D.	DHO	332-2700	Box 100, Russellville 35653
Lauderdale	H. C. Woodworth, M.D.	DHO	764-7453	Box 1036, Florence 35630
II. WEST AL DISTRICT HEALTH DEPT.			345-4131	1101 Jackson Avenue, Tuscaloosa 35401
Bibb	E. Kenneth Aycock, M.D.	DHO	926-9702	105 Church St., Centreville 35042
Greene	E. Kenneth Aycock, M.D.	DHO	372-9361	Box 269, Eutaw 35462
Lamar	E. Kenneth Aycock, M.D.	DHO	695-9195	Box 548, Vernon 35592
Pickens	E. Kenneth Aycock, M.D.	DHO	367-8174	Box 192, Carrollton 35447
Tuscaloosa	E. Kenneth Aycock, M.D.	DHO	345-4131	1101 Jackson Ave., Tuscaloosa 35401
XI. TRI-COUNTY DIST. HEALTH SERVICES			353-7021	Box 1628, Decatur 35601
Cullman	Betty W. Vaughan, M.D.	DHO	739-3530	305 N. 4th Ave., N.E., Cullman 35055
Lawrence	Betty W. Vaughan, M.D.	DHO	974-1141	Box 308, Moulton 35650
Limestone	Betty W. Vaughan, M.D.	DHO	232-3200	Box 932, Athens 35611
Morgan	Betty W. Vaughan, M.D.	DHO	353-7021	Box 1628, Decatur 35601
Autauga	Bobby H. Bryan	HSA	365-3349	Box G, Prattville 36067
Baldwin	C. P. St. Amant, Jr., M.D.	LHO	937-9561	Box 150, Bay Minette 36507
Barbour	Russell Killingsworth	HSA	775-8324	Box 217, Clayton 36016
Blount	Michael O. Adams	HSA	274-2120	Box 96, Oneonta 35121
Bullock	Ron Wheeler	HSA	738-3030	Drawer 430, Union Springs 36089
Butler	Ziba Anderson	HSA	382-3651	Box 339, Greenville 36037
Calhoun	John Screws	HSA	237-7523	Box 488, Anniston 36202
Chambers	Tom Phillips	HSA	864-8834	Box 319, LaFayette 36862
Cherokee	Jim Russell	HSA	927-3132	Box 176, Centre 35960
Chilton	Ron Stutts, Acting	HSA	755-1287	Box 147, Clanton 35045
Choctaw	Richard Jayne, Acting	HSA	459-2494	214 W. Church Street, Butler 36904
Clarke	Bill Coleman	HSA	275-3772	Box 477, Grove Hill 36451
Clay	Michael Mann	HSA	354-2181	Box 325, Ashland 36251
Cleburne	John Screws	HSA	463-2296	Box 36, Heflin 36264
Coffee	Kenneth Ball	HSA	347-9574	Box 98, Enterprise 36330
Conecuh	C. P. St. Amant, Jr., M.D.	LHO	578-1952	Box 208, Evergreen 36401
Coosa	Michael Mann	HSA	377-2244	Box 235, Rockford 35136
Covington	Ziba Anderson	HSA	222-1175	Box 186, Andalusia 36420
Crenshaw	Ron Wheeler	HSA	335-3401	Box 326, Luverne 36049
Dale	Charles Oliver	HSA	774-5146	Box 397, Ozark 36360
Dallas	S. D. Waldrop, M.D.	LHO	875-4401	Box K, Selma 36701
DeKalb	Jim C. Russell	HSA	845-1931	Box 347, Fort Payne 35967
Elmore	Bobby H. Bryan	HSA	567-5171	Box 316, Wetumpka 36092
Escambia	C. P. St. Amant, Jr., M.D.	LHO	867-3316	Box 66, Brewton 36426
Etowah	Jean Foster	HSA	547-6311	Box 555, Gadsden 35902
Fayette	Frank Banks	HSA	932-5260	Box 351, Fayette 35555
Geneva	Kenneth Ball	HSA	684-2257	Box 386, Geneva 36340
Hale	J. P. Chism, Ed.D.	HSA	624-3018	Box 87, Greensboro 36744
Henry	Russell Killingsworth	HSA	585-2660	Box 86, Abbeville 36310
Houston	J. B. Stapleton, M.D.	LHO	792-5179	Drawer 2087, Dothan 36302
Jackson	Robert J. Henderson, M.D.	LHO	259-4161	Box 398, Scottsboro 35768
Jefferson	William L. Roper, M.D.	LHO	933-9110	Box 2646, Birmingham 35202
Lee	Tom Phillips	HSA	745-5765	Box 2207, Opelika 36801
Lowndes	Virginia Little	HSA	548-2161	Box 35, Hayneville 36040
Macon	Walter Pack	HSA	727-1800	Box 27, Tuskegee 36083
Madison	Burton S. Shook, Sr., M.D.	LHO	539-3711	Box 425, Huntsville 35804
Marengo	Charles Shields	HSA	295-4205	Box 454, Linden 36748
Marion	Dayton Nichols, Acting	HSA	921-3118	Box 103, Hamilton 35570
Marshall	Robert J. Henderson, M.D.	LHO	582-3174	275 Gunter Ave., Guntersville 35976
Mobile	Alfred R. Stumpe, M.D.	LHO	690-8101	Box 2867, Mobile 36601
Monroe	Virginia Little	HSA	575-3109	Box 609, Monroeville 36460
Montgomery	Mary G. Dorrough, M.D.	LHO	263-6671	Box 4008, Montgomery 36195
Perry	J. P. Chism, Ed.D.	HSA	683-6153	Box 119, Marion 36756
Pike	Ron Wheeler	HSA	566-2860	Box 425, Troy 36081
Randolph	Michael Mann	HSA	863-8981	527 Price St., Roanoke 36274
Russell	Tom Phillips	HSA	297-0251	Box 548, Phenix City 36867
St. Clair	Michael O. Adams	HSA	338-3357	Box 627, Pell City 35125
Shelby	Ron Stutts, Acting	HSA	669-2171	Box 976, Columbiana 35051
Sumter	Thomas C. Stuart	HSA	652-7972	Drawer 340, Livingston 35470
Talladega	Perry Bryant	HSA	362-2593	Box 1012, Talladega 35160
Tallapoosa	Michael Mann	HSA	825-9203	Box 125, Dadeville 36853
Walker	Frank Banks	HSA	221-9775	Box 690, Jasper 35501
Washington	Bill Coleman	HSA	847-2245	Box 417, Chatom 36518
Wilcox	S. D. Waldrop, M.D.	LHO	682-4515	Box 27, Camden 36726
Winston	Frank Banks	HSA	489-5396	Box 57, Double Springs 35553

PLEASE NOTIFY THE BUREAU OF LOCAL HEALTH SERVICES OF ANY CHANGES IN ADDRESS, PHONE NUMBER OR ERRORS.

DHO—District Health Officer, LHO—Local Health Officer, HSA—Health Services Administrator

ORGANIZATION OF THE ALABAMA DEPARTMENT OF PUBLIC HEALTH


STATE GOVERNMENT
STATE BOARD OF HEALTH
STATE COMMITTEE OF PUBLIC HEALTH
12 - Physicians, Members of Board of Censors
4 - Chairmen of Councils
COUNCIL ON DENTAL HEALTH
COUNCIL ON ANIMAL AND ENVIRONMENTAL HEALTH
COUNCIL ON PREVENTION OF DISEASE AND MEDICAL CARE
COUNCIL ON HEALTH COSTS ADMINISTRATION AND ORGANIZATION
ADMINISTRATION
Intoxication Standards Testing & Control
Finance
Plans and Evaluations
Emergency Medical Services
Internal Audit
Legal
Personnel
STATE HEALTH OFFICER
Deputy State Health Officer
WATER IMPROVEMENT COMMISSION
(Independent Agency)
AIR POLLUTION CONTROL COMMISSION
(Separate Agency)
CLINICAL LABORATORY ADMINISTRATION
Divisions
Bacteriology, Parasitology and Fluorescent
Central Services
Sanitary Bacteriology
Serology, Cytology and Metabolic
Tuberculosis and Mycology
Virology
Branch Laboratories
PERSONAL HEALTH SERVICES ADMINISTRATION
Divisions
Women, Infants & Children (WIC)
Epidemiology
SPECIAL SERVICES ADMINISTRATION
Registrar
BUREAU OF VITAL STATISTICS
Divisions
Record Services
Statistical Services
Microfilm-Microfiche Services
Registration Services
ENVIRONMENTAL HEALTH ADMINISTRATION
Divisions
General Sanitation
Inspection
Laboratories
Public Water Supplies
Radiological Health
Solid Waste and Vector Control
BUREAU OF DENTAL HEALTH
Divisions
Dental Health Education & Prevention
Dental Services
BUREAU OF PUBLIC HEALTH NURSING
Divisions
Home Health Services
Plans, Training and Evaluation
Support Services
BUREAU OF LOCAL HEALTH SERVICES
Divisions
Local Operations
Administrative Support Services
Veterinary Public Health
BUREAU OF CLINICAL SERVICES
Divisions
Cancer Detection
Cancer Registry and Tumor Clinic
Hypertension
Immunization
Tuberculosis Control
Venereal Disease Control
BUREAU OF MATERNAL & CHILD HEALTH
Divisions
Patient Care
Quality Assurance
Support Services
Data & Evaluation
Health Education
Planning & Grants
Budget & Supplies
BUREAU OF PRIMARY PREVENTION
Divisions
Graphic Communication
Health Education
Health Information
Narcotics & Dangerous Drugs
BUREAU OF HEALTH DATA SYSTEMS
Divisions
Computer Operations
Data Entry
Systems & Programming
Technical Support
BUREAU OF LICENSURE AND CERTIFICATION
Divisions
Certification
Compliance
Field Services
Hearing Aid Dealer Licensing
Licensure
Plans & Construction
Administrative Relationship
Chairmanship Relationship
Advisory Relationship

Prepared by Bureau of Primary Prevention

Approved: Ira L. Myers
Ira L. Myers, M.D.

ADPH-D-A-1/Rev. 12-79

80's

Decade of Delicate Decisions

Alabama
Department
of
Public
Health

1980 Annual Report

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State of Alabama

DEPARTMENT OF PUBLIC HEALTH

State Office Building
Montgomery, Alabama 36130

IRA L. MYERS, M.D.
STATE HEALTH OFFICER

The Honorable Fob James
Governor of Alabama
State Capitol
Montgomery, Alabama 36130

Dear Governor James:

I am pleased to present you with our report of the activities of the Alabama Department of Public Health for 1980.

Our challenge in this decade is to be innovative so that public health services can continue to be most effective. We realize that decisions made at this time will affect public health for years to come.

Please be assured that the Health Department will continue to keep the health of Alabamians as our first priority.

Sincerely,

Ira L. Myers

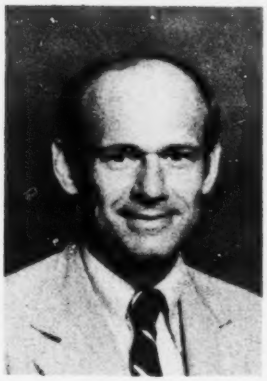
Ira L. Myers, M.D.
State Health Officer

STATE COMMITTEE OF PUBLIC HEALTH

Leon C. Hamrick, M.D.
Chairman, Fairfield

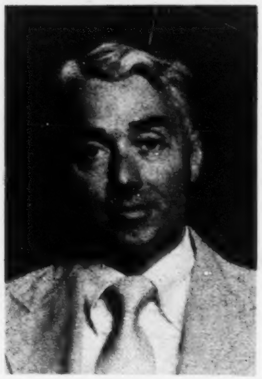
Carl A. Grote, Jr., M.D.
Vice Chairman, Huntsville

Ira L. Myers, M.D., M.P.H.
State Health Officer & Secretary

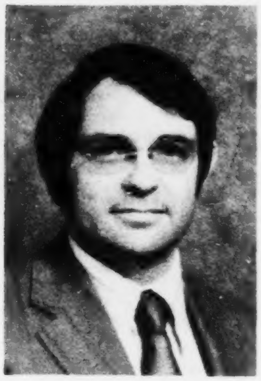


Jeff H. Beard, M.D.
Mobile

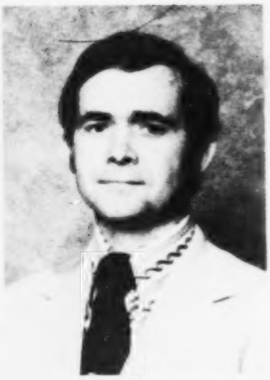
Edgar W. Branyon, Jr., M.D.
Anniston



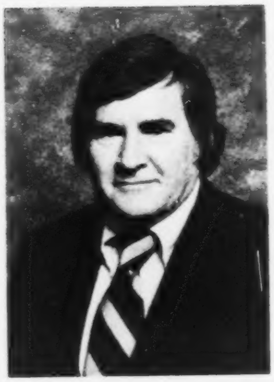
William R. Bridges, M.D.
Mobile

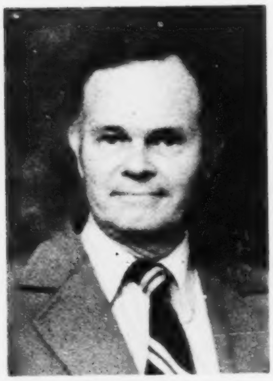


A. Derrill Crowe, M.D.
Birmingham


Ronald E. Henderson, M.D.
Birmingham

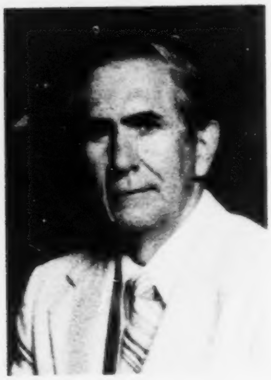
Roy R. Kracke, Jr., D.M.D
Birmingham


Mr. Charles M. Loftin
Mobile


R. Ross McBryde, M.D.
Montgomery

Margaret Millsap, Ed.D
Birmingham

John Hall Nelson, M.D.
Tuscaloosa


·Ira B. Patton, M.D.
Oneonta

Paul Schnurrenberger, D.V.M.
Auburn

Aubrey E. Terry, M.D.
Russellville,

Kenneth C. Yohn, M.D.
Eufaula

ADMINISTRATION AND BUREAU DIRECTORS

James L. Holston, Dr.P.H.
Clinical Laboratory
Administration

Frederick S. Wolf, M.D.
Personal Health
Services Administration

Naseeb L. Shory, D.D.S., M.P.H.
Bureau of Dental Health

Anne M. Smith, M.S., R.N.
Bureau of
Public Health Nursing

Joyce Gendzwill, M.D.
Bureau of
Local Health Services

Grover Dick, M.A.
Bureau of Clinical Services

Ira L. Myers, M.D.
State Health Officer
Administration

Forest E. Ludden, Ed.D., M.P.H.
Special Services Administration

William T. Willis, M.S.
Environmental
Health Administration

Robert L. Goldenberg, M.D.
Bureau of
Maternal and Child Health

James J. McVay, M.P.A.
Bureau of
Primary Prevention

James D. Pate, M.B.A.
Bureau of
Health Data Systems

Tigner S. Zorn, B.S.
Bureau of Licensure
and Certification

Ira L. Myers, M.D.

ADMINISTRATION

The decade of the eighties will be a time of change. There will be changes in programs and services. Decisions must be made regarding which services will expand and which programs will decrease or be eliminated. Decisions made at this time can affect public health for years to come.

As health problems change new priorities are assigned. Many changes are the result of a natural evolution in health care. Past concerns for contagious diseases and sanitation problems have given way to more contemporary problems.

Teenage pregnancy is a contemporary problem. In 1979 there were more than 13,000 live births in Alabama to young mothers 19 years of age and under—nearly 23 percent of all the births in Alabama. Each of these births is estimated to cost the government $18,000 per year; a total cost to the taxpayers of over $200,000,000 per year

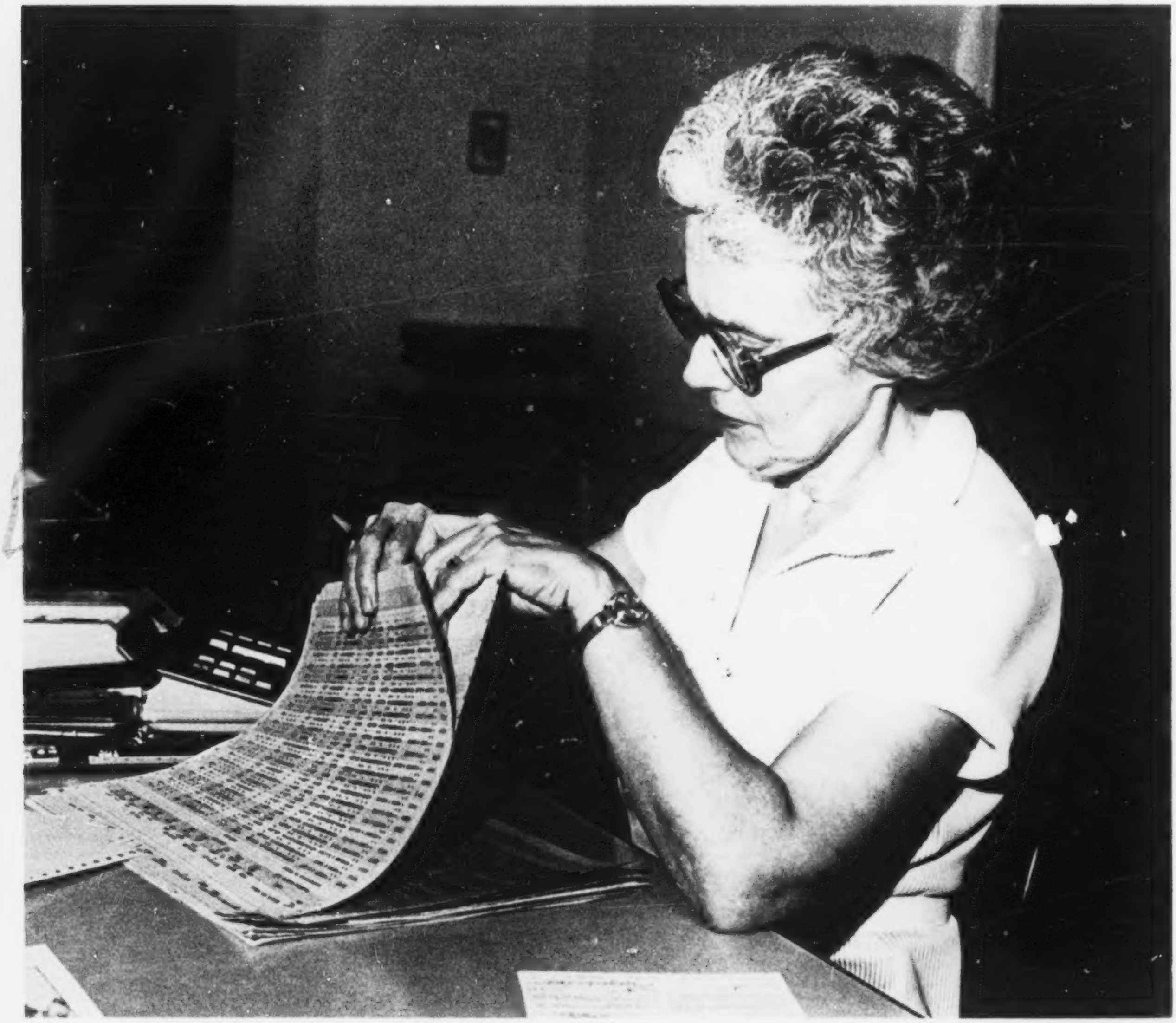
The rise in sexually transmitted diseases is of greater concern each year. During 1980 there were 478 civilian cases of primary/secondary syphilis in Alabama—an increase of nearly 60 percent over 1979.

The next decade will see many changes in public health. The challenge is to be innovative and creative. State and local health departments remain a vital part of the medical community. Contemporary solutions for contemporary problems will be offered.

The "Decade of Delicate Decisions" promises to be most rewarding.

Finance Division

The Division of Finance conducted all fiscal transactions for the State Department of Public Health and a majority of the local health departments. It received and dispensed funds in order for the departments to provide health care to the people of Alabama. The following tables show the sources and distribution of all funds.



ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE 1
SUMMARY OF RECEIPTS, DISBURSEMENTS, AND BALANCES BY SPECIAL SOURCE OF FUNDS FISCAL YEAR ENDING SEPTEMBER 30, 1980

Source	Balance 10-1-79	Receipts	Expended	Balance 9-30-80
STATE AND REVENUE FUNDS				
General Fund—Health	272,254.62	8,200,301.00	8,067,763.96	404,791.66
General Fund Transfers to Counties		4,899,699.00	4,899,699.00	—0—
ASETF Prenatal Transfer	107,168.52	284,686.30	302,217.90	89,636.92
Total	379,423.14	13,384,686.30	13,269,680.86	494,428.58
2¢ Cigarette Tax	603,442.85	2,146,948.29	2,366,278.36	384,112.78
1¢ Cigarette Tax	187,367.32	1,441,763.48	1,345,702.76	283,428.04
Water Improvement Fines	361,662.57	69,720.00	39,473.15	391,909.42
Air Pollution Fines	106,599.12	75,000.00	36,333.39	145,265.73
Hospital Licenses	24,960.40	73,148.00	74,031.57	24,076.83
Vital Statistics Fees	125,273.87	784,343.45	685,263.59	224,353.73
Emergency Medical Services	62,353.29	30,660.00	24,222.62	68,790.67
Total	1,471,659.42	4,621,583.22	4,571,305.44	1,521,937.20
Regulatory Boards				
Hearing Aid Dealers	26,274.29	6,265.00	5,706.47	26,832.82
Water Well Standards	32,210.64	37,800.00	49,618.85	20,391.79
Water Plant Operators	13,089.42	2,335.00	3,230.46	12,193.96
Registration of Sanitarians	17,757.90	1,157.00	805.75	18,109.15
Total	89,332.25	47,557.00	59,361.53	77,527.72
TOTAL STATE & REVENUE FUNDS	1,940,414.81	18,053,826.52	17,900,347.83	2,093,893.50
FEDERAL FUNDS				
Revenue Sharing				
Cancer	447.76	7,137.20	—0—	7,584.96
Emergency Medical Services	11,730.54	—0—	9,635.84	2,094.70
Vital Statistics	3,034.08	(3,034.08)	—0—	—0—
Dental Health	1,582.16	(1,582.16)	—0—	—0—
Laboaratory Construction	81,839.04	—0—	81,839.04	—0—
Environmental Lab Construction	1,620.96	(1,620.96)	—0—	—0—
Anti-Recession	—0—	395,776.02	387,277.02	8,499.00
Total	100,254.54	396,676.02	478,751.90	18,178.66
Family Planning				
Title X	57,714.09	3,689,732.68	3,686,975.98	60,470.79
Title XIX	23,983.25	531,052.06	450,525.85	104,509.46
Training Grant	(1,671.93)	14,039.06	12,367.13	—0—
Patient Fees	269,592.64	284,172.22	305,004.16	248,760.70
Total	349,618.05	4,518,996.02	4,454,873.12	413,740.95
Maternal & Child Health				
Title V, Sec. A	190,586.08	2,134,033.85	2,289,597.26	35,022.67
Title V, Sec. B	9,836.32	3,134,000.00	3,126,185.29	17,651.03
Title V, Sec. MR	3,717.72	129,000.00	130,777.24	1,940.48
Improved Pregnancy Program	961.69	512,000.00	507,864.27	5,097.42
Third Party Participation	282,517.26	251,666.18	274,947.26	259,236.18
Total	487,619.07	6,160,700.03	6,329,371.32	318,947.78
Environmental Protection Agency				
Water Improvement—106	55,920.98	1,453,850.00	1,460,697.93	49,073.05
Water Improvement—208	11,586.81	—0—	2,035.55	9,551.26
Water Improvement—74 Impd.	1,700.00	16.00	—0—	1,716.00
Water Improvement—Earned Fund	83,498.94	671.00	—0—	84,169.94
Water Improvement—Surface Impd.	9,852.68	—0—	5,663.43	4,189.25
Water Improvement—Sect. 208 1980	—0—	30,000.00	25,370.29	4,629.71
Water Improvement—UIC	—0—	25,000.00	21,230.13	3,769.87
Total Water Improvement	162,559.41	1,509,537.00	1,514,997.33	157,099.08
Air Pollution	79,947,58	879,850.00	842,310.74	117,486.84
Safe Drinking Water	126,015.84	475,000.00	425,968.13	175,047.71
Solid & Hazardous Waste	60,232.34	425,000.00	498,309.13	(13,076.79)
Total	428,755.17	3,289,387.00	3,281,585.33	436,556.84

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE 1 (continued)
SUMMARY OF RECEIPTS, DISBURSEMENTS, AND BALANCES BY SPECIAL SOURCE OF FUNDS
FISCAL YEAR ENDING SEPTEMBER 30, 1980

Source	Balance 10-1-79	Receipts	Expended	Balance 9-30-80
U.S. Public Health Service				
Comprehensive Health—314D	3,319.18	1,137,860.99	1,138,783.35	2,396.82
Health Manpower	1,994.20	45,400.00	46,989.82	404.38
Health Facilities	2,849.17	12,200.00	14,878.31	170.86
Hypertension	(4,278.87)	296,000.00	290,115.77	1,605.36
Planning & Development	572.29	35,000.00	35,387.31	184.98
Emergency Medical Services	3,885.70	819,000.00	820,509.67	2,376.03
RHI Planning	—0—	5,000.00	4,500.00	500.00
Home Health	(2,584.69)	101,800.00	91,129.27	8,086.04
MCH—HIM	(3,251.94)	431,200.00	423,696.54	4,251.52
MCH—SEC. 330	750.00	230,500.00	230,111.35	1,138.65
Hill Burton Administration	(391.09)	391.09	—0—	—0—
Hospital Construction	20,165.60	1,303,422.61	1,323,588.21	—0—
Total	23,029.55	4,417,774.69	4,419,689.60	21,114.64
Center for Disease Control				
Risk Reduction	—0—	11,843.46	10,088.86	1,754.60
Dental	—0—	75,000.00	67,608.36	7,391.64
Lead Poisoning Control	1,281.56	—0—	—0—	1,281.56
Venereal Disease	15,694.03	638,000.00	652,195.21	1,498.82
Immunization	(5,357.64)	284,070.00	276,214.23	2,498.13
Influenza	(671.86)	119,500.00	113,154.54	5,673.60
Total	10,946.09	1,128,413.46	1,119,261.20	20,098.35
Applachian Region Commission				
Northwest Ala. Health District	23,377.13	—0—	16,000.00	7,377.13
Emergency Medical Services—1203	402.87	199,022.50	194,305.90	5,119.47
Home Health	1,302.42	—0—	—0—	1,302.42
Total	25,082.42	199,022.50	210,305.90	13,799.02
Other Federal Funds				
S.S.A. Certification	1,235.63	573,500.00	573,314.43	1,421.20
AEC Radiological Health	8,869.72	23,265.69	7,838.80	24,296.61
Dept. of Agriculture—WIC Food	368,189.80	18,479,733.00	16,682,279.39	2,165,643.41
NIH Cancer	955.06	—0—	—0—	955.06
Home Health Escrow	167,760.02	236,670.07	263,366.00	141,064.09
Home Health Administration	103,414.15	92,291.00	91,293.44	104,411.71
NCH Vital Statistics	3,489.81	120,000.00	120,845.21	2,644.60
Total	653,914.19	19,525,459.76	17,738,937.27	2,440,436.68
TOTAL FEDERAL FUNDS	2,079,219.08	39,606,429.48	38,032,775.64	3,682,872.92
LOCAL & MISCELLANEOUS FUNDS				
Dental Contracts	18,951.50	34,694.81	34,711.00	18,935.31
V.D. Dallas County	478.11	(478.11)	—0—	—0—
Lab—Rubella	3,300.00	2,174.25	—0—	5,474.25
OHTS—Equipment	—0—	137,313.40	137,313.40	—0—
Environmental Lab.	269.25	123,974.00	137,481.87	(13,238.62)
Health Data Grant	10,071.62	4,123.13	4,729.52	9,465.23
Indirect Cost Earned	1,173,157.73	1,857,547.72	1,802,387.34	1,228,318.11
Laboratory—Sickle Cell	76,858.33	62,639.27	45,605.77	93,891.83
Vital Statistics	56,980.28	74,933.94	23,450.22	108,464.00
Public Health Building Renovation	—0—	200,000.00	200,000.00	—0—
Contract Safe Water Lab.	23,265.51	30,000.00	27,955.51	25,310.00
Lab. Training	894.30	600.00	101.25	1,390.05
OHTS—Child Restraint	—0—	21,500.84	34,316.49	(12,815.65)
Consumer Prod. Safety	—0—	9,371.45	9,371.45	—0—
Miscellaneous Reimbursement	(117,597.50)	828,634.26	708,586.70	2,450.06
Local Appropriations	2,438,913.74	23,069,714.97*	22,422,466.93*	3,086,161.78
TOTAL LOCAL & MISCELLANEOUS FUNDS	3,685,542.87	26,456,743.93	25,588,477.45	4,553,809.35
GRAND TOTAL	7,705,176.76	84,146,999.93	81,521,600.92	10,330,575.77

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*Includes 12,807,443.00 in funds collected and expended locally.

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE 2
SUMMARY OF PROGRAM DISBURSEMENTS BY GENERAL SOURCE OF FUNDS
FISCAL YEAR ENDING SEPTEMBER 30, 1980

Program	All Funds	State & Revenue Funds	Federal Funds	Local & Other Funds
ADMINISTRATION				
Executive	315,277.24	296,648.83	—0—	18,628.41
General Services	1,606,870.10	727,737.42	—0—	879,132.68
Finance	435,123.13	410,338.00	15,089.04	9,696.09
Personnel	146,209.30	135,220.43	—0—	10,988.87
Health Data	726,051.97	273,239.68	—0—	452,812.29
Building Renovation—Public Health Bldg.	433,374.37	—0—	—0—	433,374.37
Total	3,662,906.11	1,843,184.36	15,089.04	1,804,632.71
SPECIAL SERVICES				
Vital Statistics	825,459.73	683,270.07	120,845.21	21,344.45
Primary Prevention	467,839.72	403,604.04	10,036.47	54,199.21
Administration	55,772.28	53,666.51	—0—	2,105.77
Total	1,349,071.73	1,140,540.62	130,881.68	77,649.43
HEALTH SUPPORT SERVICES				
Local Health Services	161,034.74	161,034.74	—0—	—0—
N.W. Ala.—ARC	16,000.00	—0—	16,000.00	—0—
Public Health Nursing	312,257.51	217,147.95	91,356.91	3,752.65
Covington Home Health	13,468.25	—0—	13,468.25	—0—
Geneva Home Health	43,800.70	—0—	43,800.70	—0—
Sumter Home Health	35,461.70	—0—	35,461.70	—0—
Clinical Laboratories	3,256,206.60	2,245,968.46	784,723.72	225,514.42
Hypo-Thyroid Testing	106,633.62	106,633.62	—0—	—0—
Clinical Lab Construction	136,204.87	—0—	81,839.04	54,365.83
Non-Expend. Refund Home Health	266,366.00	—0—	266,366.00	—0—
Total	4,347,433.99	2,730,784.77	1,333,016.32	283,632.90
PLANNING, DEVELOPMENT & REGULATION				
State Health Planning & Dev. Agency	752.45	—0—	752.45	—0—
Health Manpower, Facilities, & Dev.	69,711.32	165.87	69,545.45	—0—
RHI Planning	4,500.00	—0—	4,500.00	—0—
Hospital Construction	1,323,588.21	—0—	1,323,588.21	—0—
Emergency Medical Services				
State Operations	362,215.78	95,922.15	90,685.56	175,608.07
District Implementation	945,514.83	—0—	945,514.83	—0—
Total EMS	1,307,730.61	95,922.15	1,036,200.39	175,608.07
Licensure & Certification	1,302,897.85	201,713.78	600,345.03	500,839.04
Total	4,009,180.44	297,801.80	3,034,931.53	676,447.11
ENVIRONMENTAL HEALTH				
Administration	112,733.76	112,733.76	—0—	—0—
Inspection	516,465.03	479,322.39	24,928.22	12,214.42
Radiological Health	278,138.62	269,481.90	7,838.80	880.92
General Sanitation	167,479.82	159,515.06	7,920.76	44.00
Solid Waste & Vector Control	651,613.53	153,304.40	498,309.13	—0—
Public Water Supplies	604,827.30	178,859.17	425,968.13	—0—
Environmental Laboratory	285,937.92	147,645.35	—0—	138,292.57
Environmental Lab Construction	749.70	—0—	—0—	749.70
Air Pollution Control Commission	1,350,625.49	508,188.99	842,266.17	170.33
Water Improvement Commission	2,017,958.38	503,004.36	1,514,954.02	—0—
Total	5,986,529.55	2,511,992.38	3,322,185.23	152,351.94
PREVENTABLE DISEASE				
Administration	255,502.28	253,907.50	—0—	1,594.78
Cancer	433,694.84	433,694.84	—0—	—0—
Hosp. of Cancer Patients	66,394.45	66,394.45	—0—	—0—
Venereal Disease Control	1,031,971.29	371,359.68	652,243.30	8,368.31
Immunization	531,821.30	138,033.67	393,787.63	—0—
Tuberculosis Control	1,703,295.80	1,703,295.80	—0—	—0—
Hosp. of TB Patients	709,140.00	709,140.00	—0—	—0—
Hypertension	378,433.79	88,223.61	290,191.82	18.36
Total	5,110,253.75	3,764,049.55	1,336,222.75	9,981.45

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE 2 (continued)
SUMMARY OF PROGRAM DISBURSEMENTS BY GENERAL SOURCE OF FUNDS
FISCAL YEAR ENDING SEPTEMBER 30, 1980

Program	All Funds	State & Revenue Funds	Federal Funds	Local & Other Funds
FAMILY HEALTH SUPPORT				
Family Planning	4,516,433.40	—0—	4,516,433.40	—0—
Women, Infants & Children Food	16,684,316.75	—0—	16,684,316.75	—0—
Maternal & Child Health Administration	1,845,650.42	302,217.90	1,416,838.45	126,594.07
Prenatal & Well Baby Clinics	203,278.94	—0—	203,278.94	—0—
Mental Retardation Program	213, 708.38	—0—	213,708.38	—0—
Maternal & Infant Care	1,433,542.66	—0—	1,433,542.66	—0—
Children & Youth Program	1,643,252.41	165,135.00	1,478,117.41	—0—
Intensive Infant Care	185,756.83	—0—	185,756.83	—0—
Special Dental	166,745.13	—0—	166,745.13	—0—
Improved Pregnancy Outcome	276,522.51	—0—	277,522.51	—0—
Perinatal Program	357,037.06	—0—	357,037.06	—0—
Section 330	223,810.98	—0—	223,810.98	—0—
HIM Project	453,021.60	—0—	453,021.60	—0—
Total MCH	7,002,326.92	467,352.90	6,408,379.95	126,594.07
Dental Health	361,309.82	185,580.92	141,007.99	34,720.91
Total	28,564,368.89	652,933.82	27,750,138.09	161,314.98
REGULATORY BOARDS				
Hearing Aid Board	5,706.47	5,706.47	—0—	—0—
Water Well Standards Board	49,618.85	49,618.85	—0—	—0—
Cert. of Water Plant Operators	3,230.46	3,230.46	—0—	—0—
Registration of Sanitarians	805.75	805.75	—0—	—0—
Total	59,361.53	59,361.53	—0—	—0—
LOCAL HEALTH UNITS	28,432,476.93	4,899,699.00	1,110,311.00	22,422,466.93*
GRAND TOTAL	81,521,600.92	17,900,347.83	38,032,775.64	25,588,477.45

*Includes 12,807,443.00 in funds collected and expended locally.

ALABAMA DEPARTMENT OF PUBLIC HEALTH
TABLE 3
SUMMARY OF DISBURSEMENTS BY OBJECT
FISCAL YEAR ENDING SEPTEMBER 30, 1980

Object	**Expended**
Salaries	16,486,536.53
Fringe	2,081,160.02
Travel—In State	1,229,820.28
Travel—Out of State	47,410.23
Repairs & Maintenance	85,099.65
Rentals & Leases	590,358.61
Utilities & Communications	1,193,496.86
Professional Services	1,844,873.30
Supplies & Materials	1,368,166.64
Drugs and Medical Expense	1,581,384.07
Food—Women, Infants, & Children	13,425,891.07
Indirect Cost	1,675,379.31
Training	59,874.68
Trans. Equiptment Operations	131,261.93
Grants & Contracts	15,521,396.08
Capital Outlay	569,318.81
Trans. Equiptment Purchases	112,176.81
Other Equiptment Purchases	723,375.55
Non-Expenditure Disbursements	372,153.56
County Health Departments	22,422,466.93
Total	81,521,600.92

Internal Audit Division

During 1980 the Internal Audit Division represented the State Health Officer on auditing matters in meetings with the State Examiners of Public Accounts, auditors from various branches of the federal government and auditors from various CPA firms.

Personnel from this division met with certain Health Department administration, bureau and division directors in order to discuss and respond to audit findings.

A compliance audit of the Special Supplemental Food Program for Women, Infants and Children (WIC) was started in 13 local agencies. This audit had not been finalized as of December 31, 1980.

The audit impact of certain legislative actions was evaluated, and recommendations pertaining to those legislative actions were made.

Personnel from the division monitored the Health Department's internal system. Therefore all contracts and agreements involving the Health Department were sent to the Finance Division, the Legal Division, the State Health Officer and the Internal Audit Division for review and approval prior to final execution of the contracts and agreements.

Intoxication Standards (Testing and Control)

The Chemical Test for Intoxication Act, commonly referred to as the Implied Consent Law, was enacted in 1969 by the legislature. By this law the State Board of Health is charged with the approval of testing equipment, methods, procedures and certification of persons who conduct the analyses to determine blood alcohol levels. This responsibility mandates that the State Board of Health make available to the various agencies and the courts support testimony upon which decisions can be made.

Certification of operators is another function of the Health Department, acting for the State Board of Health. Certification confirms the operators' qualifications to administer the tests which measure the brain impairment by determining the blood alcohol content. It further assures that operators are properly trained and will maintain that degree of competency and will adhere to adopted standards. Consequently the department must continually monitor the training program to make sure that each operator receives the proper training. At the close of 1980, there were 3,423 instrument operators trained to administer breath tests utilizing approved instruments.

Once the certification has been issued, operators are required to attend training sessions held twice a year. Failure to meet this requirement results in suspension of the certification until the required training has been acquired.

In addition to the certification of the law enforcement personnel administering breath tests to determine blood alcohol levels, the department certifies laboratory personnel who analyze blood and urine specimens. The certification is based on education, qualifications and experience.

Driving while intoxicated must be controlled through strict law enforcement because the cost of it is tremendous.

Legal Division

The Legal Division of the State Department of Public Health was staffed by two attorneys and one secretary. Both attorneys are designated assistant attorneys general performing those duties and functions common to other assistants but limited to matters pertaining to public health. Such duties include receiving, researching and writing opinions; representing the Attorney General in providing legal assistance and counsel to various state boards; and consulting and coordinating with the Attorney General on public health matters.

During the year the staff attorneys were engaged in representing the Board of Health and the Health Department and its personnel in 49 different actions before state and federal courts and administrative bodies. These cases dealt with a myriad of subjects such as sewage disposal, medical facilities construction and licensure, defamation, program management, negligence, civil rights and personnel.

The Legal Division functioned as in-house counsel to all offices of the State Health Department and to the majority of the county health departments. In this regard the staff attorneys review all contracts, leases and other instruments as well as correspondence for legal implications and sufficiencies. A number of Board of Health regulations were promulgated during the year involving extensive in-put and review. Staff counsel furnished on a day-to-day basis legal advice to staff members of the state and county health departments involving interpretations of statutes and regulations and appropriate legal and administrative actions to be pursued in their enforcement.

The Legal Division functions as "special actions" office for the department on any and all matters assigned by the State Health Officer.

Personnel Division

Providing quality health services to all Alabamians originates with the hiring of efficient personnel. To ensure that the Health Department maintains productive and knowledgeable employees, clerical and supervisory workshops were continued to train employees in additional skills beneficial to carrying out their responsibilities.

To acquaint the supervisory employees of the Health Department with certain disciplines and aspects of management and to improve managerial ability, a contract was again negotiated with the staff of the Department of Government at Auburn University at Montgomery to conduct six workshops throughout the state. Approximately 176 supervisory employees were in attendance at the sessions throughout the state between January 16, 1980, and May 2, 1980. Managerial skills focused on were improvement in communications, human relations, organization, planning and control.

During 1980 three professional development workshops were also held for clerical staff between July 10, 1980, and August 29, 1980. The workshops were conducted by an independent consultant who has led seminars, workshops and study groups for various departments of state government as well as other associations. The training included perfecting skills in effective self-expression, correct grammatical usage, proofreading, telephone etiquette, letter format, proper appearance and behavior and other valuable suggestions for secretarial staff. The various health departments in the state were well represented at the training sessions with 41 employees from the state level staff attending the Montgomery workshop and a total of 73 attending the workshops conducted in Andalusia and Oneonta, Alabama, for county personnel.

Evaluations and responses received by those attending the clerical and the supervisory workshops revealed that the sessions were very beneficial; therefore it is believed that conscientous employees will put forth a determined effort to perform their duties and execute their responsibilities in a professional and effective manner.

During the week of August 4, 1980, the State Personnel Department began a statewide classification and pay study of all merit system jobs. The objectives of the study were to:

1. Reduce the number of classifications and the complexity of the classification structure;
2. Bring classifications and allocations of jobs up-to-date to reflect work as it now exists;
3. Correct inequities in pay and other relationships among job classes;
4. Establish realistic pay structures and levels that are competitive with the private sector and with other public employers in the Southeast.

In that connection position classification questionnaires were completed on all the positions in the department by the employees and supervisors. There were 1,060 state positions and 1,596 county positions for a total of 2,596 positions. Approximately 20 percent of these positions were audited on the job by the State Personnel Department in connection with the study. Results of the study will be revealed in March of 1981 at which time the consultants will make their recommendations to the State Personnel Board and the Governor.

In addition to assisting in the above study, 258 state positions and 370 county positions were reviewed during the year by actual on-site job studies or by questionnaires. The number of positions reallocated to a different classification were 23 state positions and 24 county positions.

In the area of recruitment, the combined efforts of the Health Department and State Personnel have produced 560 entry level nurses that were placed on the employment registers for possible employment throughout the state. Other continuous recruitment figures were: 162 entry level environmentalists, 48 Microbiologist I's, 18 Public Health Engineer I's, 15 public health physicians, 132 home economists, 47 nutritionists and 523 human services aides.

In addition to the activity involved in the recruitment of the continuous classifications, there were 341 Public Health Representative I candidates placed on the register as well as 73 Pollution Control Specialist I's. These classifications have not been open for recruitment for some three to four years due to test validation proceedings.

By the end of the year, there were 872 state employees and 1,260 county employees on the payrolls. Total combined accessions of 487 consisted of 273 probationary, 75 provisional, 31 temporary, 10 emergency, 32 reemployment, 26 transfer, 13 internal transfer and 27 unskilled appointments. There were six non-status to probationary appointments, and promotions numbered 123 for this period.

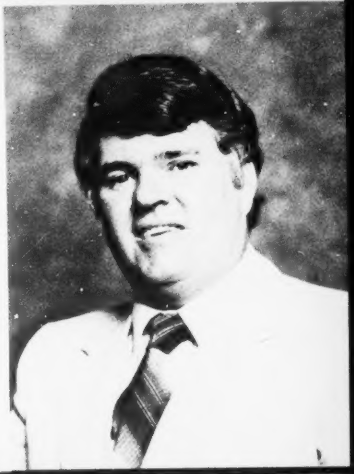
Separations numbered 424 of which 228 were resignations, 44 were transfers, 13 internal transfers, 91 expiration of appointments, six layoffs and seven dismissals. There were 35 retirements during this period.

Division of Planning and Evaluation

The division provided substantial planning and administrative support services to the department and maintained departmental coordination with a number of other state agencies. Considerable time was devoted to participation in the state's health planning and development program directed by the State Health Planning and Development Agency. A major effort during the year was the planning and administrative tasks related to the reorganization of the department and public health services in the state. These actions were preparatory to the decentralization of management of several programs to health service areas under the direction of an assistant state health officer for each area. Proposed to strengthen the delivery of public health services, these changes are scheduled for implementation at the beginning of 1981.

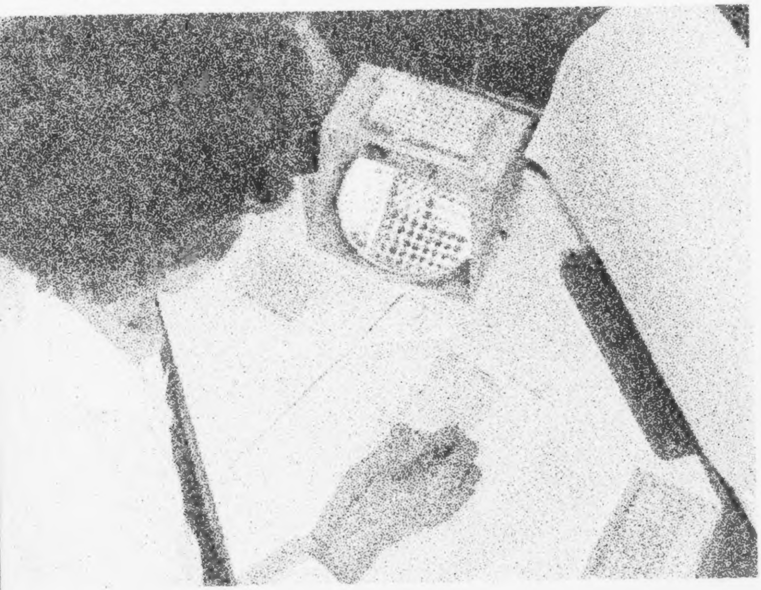
EMERGENCY MEDICAL SERVICES OFFICE—This office regulates the statewide ambulance industry and provides programmatic assistance and direction for the development and maintenance of regional emergency medical service systems. The office also provides staffing for the State EMS Advisory Board and its technical committees concerned with legislation, continuing education, intravenous fluids and drugs, emergency medical technician (EMT) test development and ongoing evaluation; and the categorization/designation of specialty treatment centers. Significant activities during 1980 included:

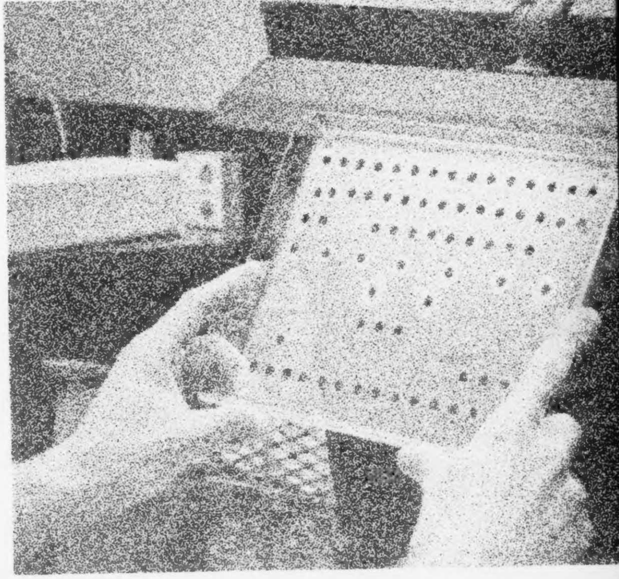
Course Coordination and Review:	
Ongoing review and technical assistance provided to	
EMT Basic Training Locations	35
EMT Intermediate Locations	17
EMT Paramedic Locations	8
EMT Testing:	
EMT Basics	2,342
EMT Intermediates	675
EMT Basics (Refresher Course)	22
Total	3,039
(Additionally 328 paramedics were trained and locally tested during the same period.)	
Continuing Education:	
Courses reviewed, staffed, approved	130
Students trained, record filed (OHTS funds)	2,000
Inspections:	
Emergency Ambulance Vehicles	317
Licensure:	
Ambulance Service	136
Ambulance Personnel (1980)	2,239
Ambulance Personnel (Cumulative)	7,369
I.V. Fluid/Drug Authorization:	
Authorizations Issued	118
(Note: 22% increase over previous period.)	
Federal Grants Administration:	
Regional EMS systems development and advanced life support projects.	
Technical assistance provided to six regional lead agencies.	
Title XII Grants (DHHS)	$1,570,223
Appalachian Region EMS Grants	272,132
Total EMS Grants	$1,842,355
Other Projects:	
Anti-shock Trousers	985
An OHTS grant for $175,000 was used to provide these trousers to ambulance and rescue services.	

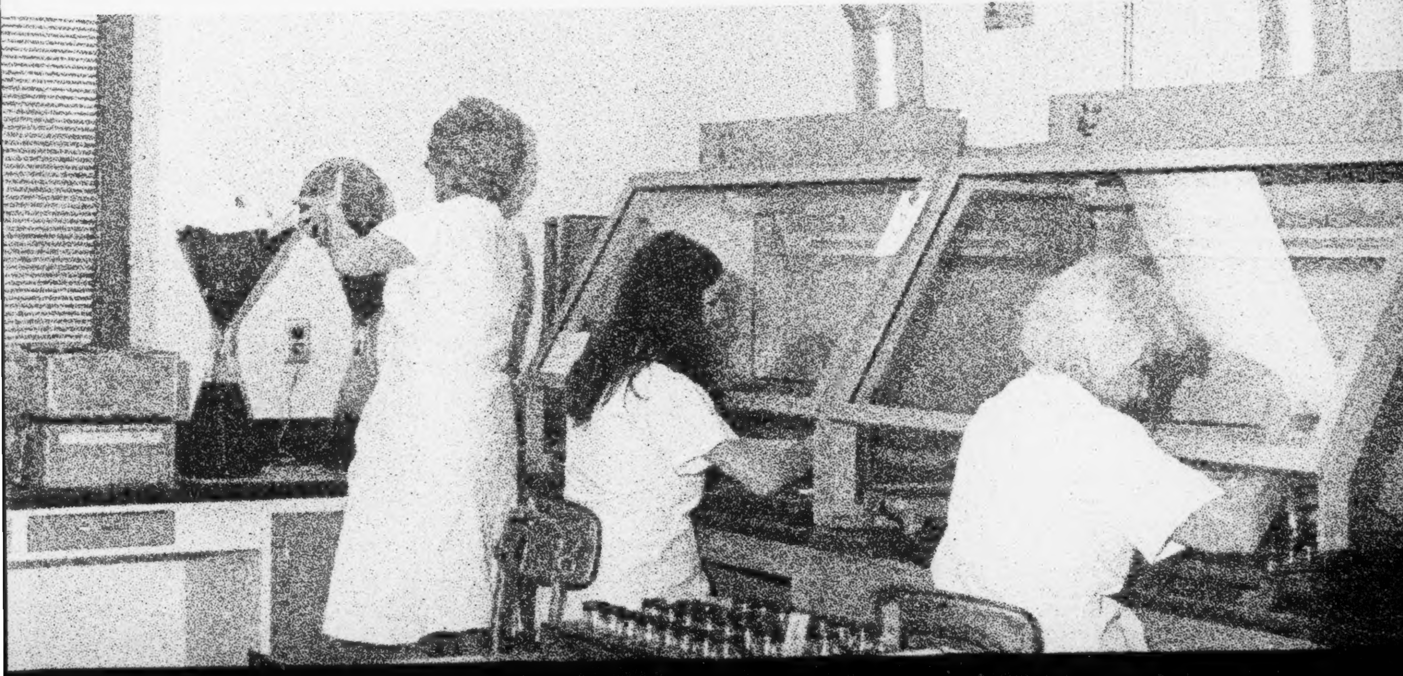


James L. Holston, Dr.P.H.

CLINICAL LABORATORY ADMINISTRATION







The Clinical Laboratory Administration maintained a progressive posture in 1980 in spite of the severe budgetary cut suffered in 1979. Several new programs were instituted on a statewide basis; new technical procedures were investigated; and a diagnostic work load measurement system was developed and implemented.

In February the neonatal hypothyroid screening program officially began statewide. The PKU filter paper collection kit was redesigned to allow both hypothyroid and phenylketonuria tests to be performed on the same specimen. The utilization of a single filter paper has proven to be practical and cost-effective. During the year 51,122 newborns were screened and five PKU and nine hypothyroid infants were detected.

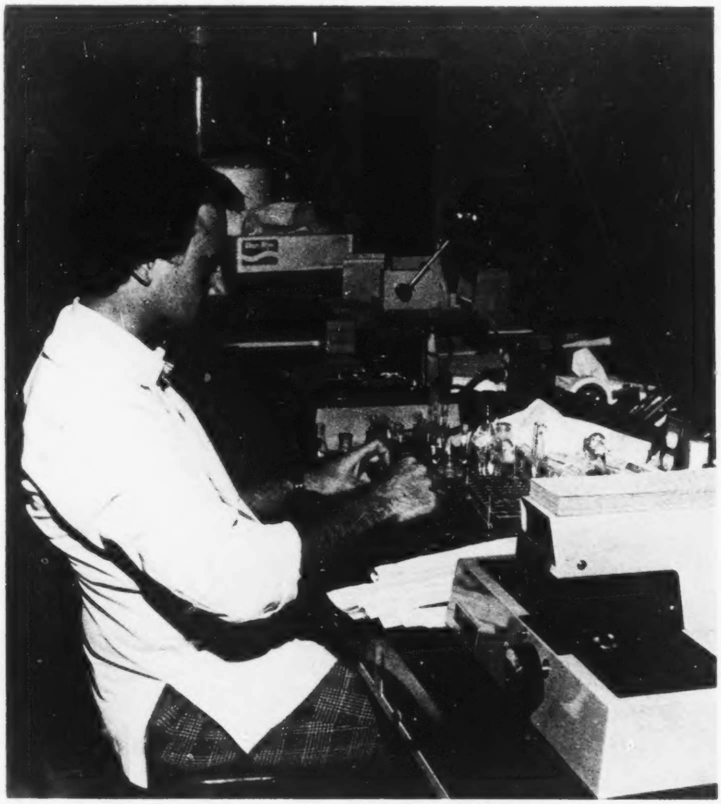
During 1980 the tuberculosis laboratory began performing drug susceptibility tests routinely on all new patients. These tests will be repeated at three-month intervals for as long as the patient's specimen or culture is positive. Prior to this time drug susceptibility tests were performed only when requested by the physician.

The immunodiffusion test for blastomycosis was evaluated and found to be a useful adjunct to the complement fixation procedure. Both tests for the detection of *Blastomyces dermatitidis* are now routinely performed on fungal serology specimens.

In May the Birmingham Branch Laboratory moved into its new facility located in the Jefferson County Health Department. The move was completed in two days without interruption of services. Dedication ceremonies were held in February of 1981.

In a continuing effort to provide up-to-date laboratory services, several new procedures were investigated. These included indirect fluorescent antibody techniques for rickettsiae, Legionnaires' disease and herpes; radioimmunoassay and enzyme immunoassay for hepatitis A and B, toxoplasmosis and rubella; *Bacillus stearothermophilus* assay for the presence of inhibitory substances in milk; and the feasibility of routinely screening for *Campylobacter enteritis*. It is anticipated that when funds become available some of these procedures will be offered on a routine basis.

Working closely with management consultants from the Centers for Disease Control (CDC), a diagnostic work load measurement system was instituted in the central and branch laboratories. All costs for laboratory operations and test determinations were identified. Time studies were conducted for each test procedure, and work time units were established. This information was used to calculate accurately the cost of providing individual laboratory services and measuring productivity levels. Savings have already been realized from the implementation of the cost accounting system. It is expected that future costs will be further reduced and productivity raised by increasing the efficiency of laboratory management.



Bacteriology Division

GENERAL BACTERIOLOGY—This section received 1,273 cultures from private and hospital laboratories throughout the state for isolations and/or identification. The 1,016 bacteria identified were:

Achromobacter species	1
Achromobacter xylosoxidans—biotype I	8
Achromobacter xylosoxidans—biotype II	1
Acinetobacter calcoaceticus var. *anitratus*	19
Acinetobacter calcoaceticus var. *lwoffi*	14
Actinobacillus actinomycetemcomitans	2
Actinomyces viscosus	2
Aerococcus species	1
Aeromonas species	1
Aeromonas hydrophila	3
Alcaligenes species	1
Alcaligenes denitrificans	1
Alcaligenes faecalis	1
Anaerobiospirillus succiniproducens	2
Bacillus species	14
Bacillus cereus	4
Bacillus megaterium	1
Bacillus subtilis	1
Bacteroides species	21
Bacteroides CDC Group F-2	2
Bacteroides clostridiformis ssp. *girans*	2
Bacteroides distasonis	7
Bacteroides fragilis	14
Bacteroides thetaiotaomicron	1
Bacteroides urealyticus	1
Bifidobacterium species	2
Bifidobacterium eriksonii	1
Bifidobacterium longum ssp. *longum*	1
Bordetella bronchiseptica	2
Bordetella parapertussis	1
Bordetella pertussis	2
Branhamella catarrhalis	8
Brucella abortus	1
Campylobacter fetus ssp. *jejuni*	23
Capnocytophage species	2
Citrobacter amalonaticus	1
Citrobacter diversus	3
Citrobacter freundii	7
Clostridium species	6
Clostridium perfringens	19
Clostridium ramosum	1
Clostridium septicum	4
Clostridium sphenoides	3
Clostridium sporogenes	1
Corynebacterium species	25
Corynebacterium aquaticum	1
Corynebacterium equii	1
Corynebacterium ovis	1
Eikenella corrodens (HB-1)	5
Enterobacter species	3
Enterobacter agglomerans	20
Enterobacter cloacae	3
Enterobacter liquefaciens	1
Erysipelothrix rhusiopathiae	1
Escherichia coli	16
Eubacterium lentum	1
Flavobacterium species	1
Flavobacterium meningosepticum	1
Fusobacterium species	1
Fusobacterium necrophorum	1
Fusobacterium nucleatum	1
Group II-F	3
Group II-K Type 2	1
Group V-A (1)	1
Group VE-1	1
Group VE-2	5
Group M-5	1
Haemophilus species No. 118	1
Haemophilus aegyptius	5
Haemophilus aphrophilus	1
Haemophilus hemolyticus	1
Haemophilus influenzae biotype III	1
Haemophilus influenzae—unable to type	158
Haemophilus influenzae—Type A	1
Haemophilus influenzae—Type B	20
Haemophilus influenzae—Type C	3
Haemophilus influenzae—Type D	3
Haemophilus influenzae—Type E	2
Klebsiella ozonae	1
Klebsiella pneumonia	11
Lactobacillus species	7
Lactobacillus brevis	1
Lactobacillus casei ssp. *rhamnosus*	1
Lactobacillus catenaforme	1
Listeria monocytogenes	8
Listeria monocytogenes—Type 46	1
Micrococcus species	3
Moraxella species	5
Moraxella nonliquefaciens	1
Moraxella osloensis	2
Moraxella phenylpyruvica	7
Moraxella urethralis	1
Mycobacterium rhodochrous complex	4
Mycoplasma pneumonia	1
Neisseria flavescens	2
Neisseria gonorrhoeae	143
Neisseria lactamica	1
Neisseria meningitidis—unable to type	6
Neisseria meningitidis—Group B	15
Neisseria meningitidis—Group C	11
Neisseria meningitidis—Slaterus Y	2
Neisseria meningitidis W135	4
Neisseria mucosa	1
Neisseria sicca	2
Neisseria subflava	7
Nocardia asteroides	2

Pasteurella hemolytica	1
Pasteurella multocida	7
Pasteurella ureae	1
Peptococcus CDC Group 2	3
Peptostreptococcus species	16
Peptostreptococcus CDC Group 2	1
Peptostreptococcus CDC Group 3	1
Peptostreptococcus CDC Group 4	1
Pityrosporum species	2
Propionibacterium species	10
Propionibacterium acnes	17
Propionibacterium arabinosum	2
Proteus mirabilis	2
Providencia species	1
Providencia rettgeri	3
Providencia stuartii (urea +)	1
Pseudomonas species	19
Pseudomonas aeruginosa	11
Pseudomonas acidovorans	5
Pseudomonas alcaligenes	5
Pseudomonas cepacia	3
Pseudomonas fluorescens	5
Pseudomonas maltophilia	10
Pseudomonas paucimobilis	2
Pseudomonas pseudoalcaligenes	1
Pseudomonas putida	5
Pseudomonas putrefaciens	1
Pseudomonas stutzeri complex	2
Pseudomonas testosteroni	1
Salmonella enteritidis ser. *heidelberg*	1
Salmonella enteritidis ser. *montevideo*	1
Salmonella enteritidis ser. *litchfield*	2
Salmonella enteritidis ser. *newport*	1
Salmonella enteritidis ser. *schwarzengrund*	1
Sarcina species	4
Serratia species	1
Serratia liquefaciens	1
Serratia marcescens	2
Staphylococcus—coagulase positive	3
Staphylococcus—coagulase negative	10
Streptococcus species	7
Streptococcus—Group A	1
Streptococcus—Group B	11
Streptococcus—Group B biotype III	1
Streptococcus—Group C	10
Streptococcus—Group D	2
Streptococcus—Group F	1
Streptococcus—Group G	1
Streptococcus species-enterococcus	4
Streptococcus acidominimus	1
Streptococcus anginosusconstellatus	2
Streptococcus mirbillorium	3
Streptococcus mitis	7
Streptococcus MG-*intermedius*	5
Streptococcus mutans	1
Streptococcus salivarius	4
Streptococcus sanguis I	6
Streptococcus sanguis II	9
Streptococcus uberis	1
Streptococcus pneumoniae—unable to type	1
Streptococcus pneumoniae—type 2	1
Streptococcus pneumoniae—type 3	3
Streptococcus pneumoniae—type 4	6
Streptococcus pneumoniae—type 12	2
Streptococcus pneumoniae—type 14	1
Streptococcus pneumoniae—type 19	1
Vibrio species—Halophilic Lactose Fermenting	1
Vibrio parahaemolyticus	1
Yersinia enterocolitica	1

In addition 22 throat cultures were screened for diphtheria with no positives found, and 35 cultures of staphylococci were tested for pathogenicity. This unit provided laboratory services in the epidemiological investigations of suspected outbreaks of whooping cough, *Campylobacter* enteritis and cholera. One serum was tested for botulism toxin.

ENTERIC BACTERIOLOGY—County health departments and other public agencies and clinics submitted 1,870 routine stool specimens to be screened for enteric pathogens. Private and hospital laboratories from throughout the state submitted some 670 cultures for confirmation and serotyping. The following pathogens were identified and serotyped:

Salmonella typhi	8
Salmonella cholera-suis bio: Kunzendorf	6
Salmonella enteritidis-serotype:	
typhimurium	239
heidelberg	130
infantis	49
saint paul	31
newport	29
javiana	26
muenchen	26
agona	24
litchfield	14
drypool	10
derby	8
java	8
thompson	8
enteritidis	7
hartford	6
oranienburg	5
mississippi	5
berta	4
blockley	4
give	4
ohio	4
muenster	4
barielly	3
bredeney	3

kentucky	3
montevideo	3
san diego	3
schwarzengrund	3
adelaide	2
branderup	2
daytona	2
dusseldorf	2
johannesburg	2
london	2
west hampton	2
anatum	1
cairo	1
chailey	1
djuga	1
gatow	1
kunduchi	1
livingstone	1
miami	1
manhatten	1
mission	1
molade	1
nachshonim	1
newington	1
paratyphi-A	1
pensacola	1
rubislaw	1
verchow	1
havana	1
Unable to classify	5
TOTAL SALMONELLA	714

Shigella sonnei	151
Shigella flexneri	7
Shigella boydii	1
Other	4
TOTAL SHIGELLA	163
TOTAL POSITIVES	877

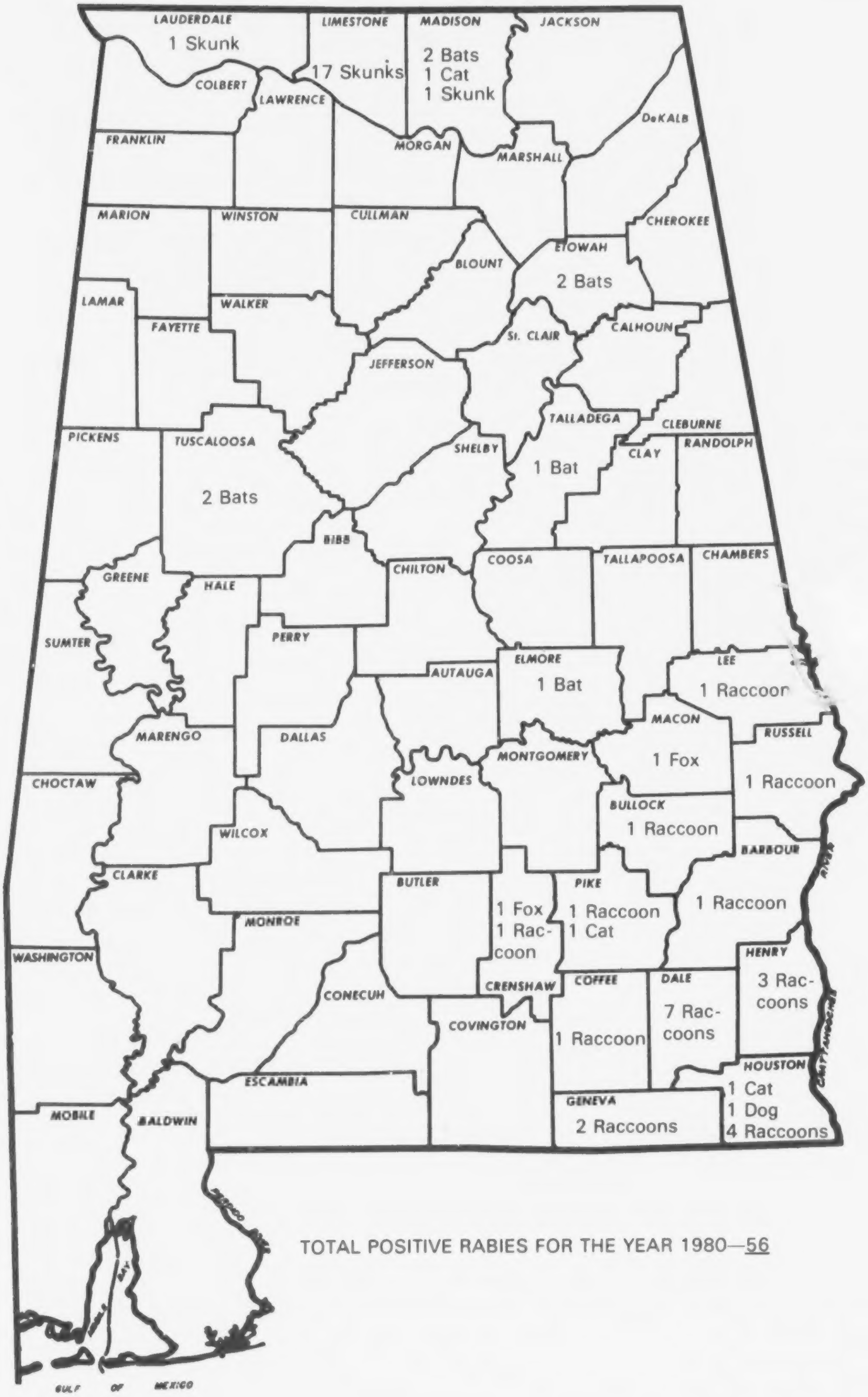
The number of enteric specimens decreased by 42 percent from 1979 because routine screening was discontinued for private physicians. The total number of positives however increased by approximately 5 percent.

RABIES—The 896 animal brains received for rabies examination in 1980 represent a 32 percent decrease from 1979, and the positives decreased by 43 percent from the previous year. The animals diagnosed as positive by the fluorescent antibody test were:

Raccoon	23
Fox	2
Cat	2
Bat	1
Dog	1
TOTAL	29

In addition to these routine examinations, the central laboratory prepared rabies infected and normal mouse brain suspensions for use in the FA procedure.

POSITIVE RABIES 1980


LAUDERDALE
1 Skunk
LIMESTONE
17 Skunks
MADISON
2 Bats
1 Cat
1 Skunk
JACKSON
COLBERT
LAWRENCE
DeKALB
FRANKLIN
MORGAN
MARSHALL
MARION
WINSTON
CULLMAN
CHEROKEE
BLOUNT
ETOWAH
2 Bats
LAMAR
WALKER
FAYETTE
St. CLAIR
CALHOUN
JEFFERSON
TALLADEGA
CLEBURNE
PICKENS
TUSCALOOSA
2 Bats
SHELBY
1 Bat
CLAY
RANDOLPH
BIBB
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
GREENE
HALE
SUMTER
PERRY
ELMORE
1 Bat
LEE
1 Raccoon
AUTAUGA
MACON
1 Fox
RUSSELL
1 Raccoon
MARENGO
DALLAS
MONTGOMERY
CHOCTAW
LOWNDES
BULLOCK
1 Raccoon
WILCOX
BARBOUR
1 Raccoon
CLARKE
BUTLER
1 Fox
1 Raccoon
PIKE
1 Raccoon
1 Cat
MONROE
WASHINGTON
HENRY
3 Raccoons
CRENSHAW
COFFEE
1 Raccoon
DALE
7 Raccoons
CONECUH
COVINGTON
HOUSTON
1 Cat
1 Dog
4 Raccoons
ESCAMBIA
GENEVA
2 Raccoons
MOBILE
BALDWIN
CHATTAHOOCHEE RIVER
MOBILE BAY
PERDIDO BAY
GULF OF MEXICO

TOTAL POSITIVE RABIES FOR THE YEAR 1980—56

1980
POSITIVE RABIES IN ALABAMA

Entire State	January	February	March	April	May	June	July	August	September	October	November	December	TOTAL
Autauga													
Baldwin													
Barbour						1 Raccoon							1
Bibb													
Blount													
Bullock									1 Raccoon				1
Butler													
Calhoun													
Chambers													
Cherokee													
Chilton													
Choctaw													
Clarke													
Clay													
Cleburne													
Coffee									1 Raccoon				1
Colbert													
Conecuh													
Coosa													
Covington													
Crenshaw					1 Fox					1 Raccoon			2
Cullman													
Dale				1 Raccoon		1 Raccoon		1 Raccoon		1 Raccoon	1 Raccoon	2 Raccoons	7
Dallas													
DeKalb													
Elmore								1 Bat					1
Escambia													
Etowah							1 Bat		1 Bat				2
Fayette													
Franklin													
Geneva		1 Raccoon										1 Raccoon	2
Greene													
Hale													
Henry					1 Raccoon		1 Raccoon			1 Raccoon			3
Houston							1 Raccoon	1 Raccoon	2 Raccoons	1 Dog	1 Cat		6
Jackson													
Jefferson													
Lamar													
Lauderdale						1 Skunk							1
Lawrence													
Lee					1 Raccoon								1
Limestone			1 Skunk	4 Skunks	6 Skunks	2 Skunks		1 Skunk	1 Skunk	1 Skunk	1 Skunk		17
Lowndes													
Macon						1 Fox							1
Madison								1 Bat, 1 Cat		1 Bat	1 Skunk		4
Marengo													
Marion													
Marshall													
Mobile													
Monroe													
Montgomery													
Morgan													
Perry													
Pickens													
Pike							1 Cat			1 Raccoon			2
Randolph													
Russell	1 Raccoon												1
St. Clair													
Shelby													
Sumter													
Talladega									1 Bat				1
Tallapoosa													
Tuscaloosa									2 Bats				2
Walker													
Washington													
Wilcox													
Winston													
TOTAL	1 Raccoon	1 Raccoon	1 Skunk	1 Raccoon 4 Skunks	1 Fox 2 Raccoons 6 Skunks	2 Raccoons 3 Skunks 1 Fox	1 Bat 2 Raccoons 1 Cat	2 Raccoons 2 Bats 1 Cat 1 Skunk	4 Raccoons 4 Bats 1 Skunk	4 Raccoons 1 Dog 1 Skunk 1 Bat	1 Raccoon 2 Skunks 1 Cat	3 Raccoons	56

BORDETELLA PERTUSSIS—A direct fluorescent antibody test was employed in screening 106 nasopharyngeal smears for the presence of *Bordetella pertussis*, the causative agent of whooping cough, and 65 presumptive positives were reported.

NEISSERIA GONORRHOEAE—The central laboratory screened 82,564 cultures for the presence of *Neisseria gonorrhoeae* and reported 6,554 (7.9 percent) positives. A 25 percent increase in total specimens and a 24 percent increase in total positives over last year were reported.

Beta lactamase and/or penicillin sensitivity tests were run on 105 isolates, and three penicillinase producing (penicillin resistant) strains were found.

PARASITOLOGY—Examination for parasitic infection was performed on 16,116 specimens, a 13 percent decrease from 1979. The following intestinal parasites were reported:

Hookworm	203
Ascaris lumbricoides	316
Enterobius vermicularis (Pinworm)	152
Trichuris trichiura	46
Strongyloides	15
Taenia	5
Clonorchis	65
Entamoeba coli	555
Endolimax nana	404
Entamoeba hartmanni	83
Entamoeba histolytica	30
Giardia lamblia	593
Chilomastix mesnili	2
Iodamoeba butschlii	17
Dientamoeba fragilis	1
TOTAL	2,487

SANITARY BACTERIOLOGY—Of the 147 samples which the food bacteriology section examined for the presence of bacterial contamination or toxins, four foods were found to be contaminated.

Food	**Organism**	**Toxin**
Baked Ham	*Staphylococcus*—coagulase positive	*Staphylococcus* enterotoxin D
Brownie	*Staphylococcus*—coagulase positive	*Staphylococcus* enterotoxin D
Chicken Salad	*Staphylococcus*—coagulase positive	
Frozen Pizza	*Bacillus cereus*	

In the water bacteriology section, samples from both public and private water supplies were analyzed for the presence of coliform bacteria and residual chlorine. Of the 17,821 samples tested, 1,387 showed coliform counts of over four per milliliter, indicating possible contamination. The total number of specimens received showed a 28 percent increase over 1979, but there was a 10 percent decrease in total positives.

This year the dairy bacteriology section performed over 21,000 tests on the 6,399 milk and dairy product samples examined in accordance with the procedures outlined in the 14th edition of *Standard Methods for Examination of Dairy Products*. The presence of inhibitory substances was confirmed in five of these products. The work load increased by 36 percent over 1979.

OTHER ACTIVITIES—All sections in the Bacteriology Division were involved in proficiency testing activities. The *Neisseria gonorrhoeae* (GC) section served as a reference laboratory for the Centers for Disease Control (CDC) and the Tennessee State Health Department. Both the GC and rabies sections sent check samples to branch laboratories on a regular basis. Other sections participated in the proficiency testing programs provided by CDC and the State Laboratory Evaluation Officer for water and dairy products.

The FA section participated in a field study conducted by CDC to evaluate the effectiveness of an enzyme inhibitor for the preservation of the FA staining characteristics of *Bordetella pertussis* in nasopharyngeal smears. The study will continue into 1981.

The GC section conducted a two-day workshop at the central laboratory for VD Control field workers in the diagnosis of gonorrhea from Gram stained smears.

A microbiologist from the sanitation section began an AOAC collaborative study on the identification of *Bacillus cereus*.

The bacteriology section worked with personnel in the media section to set up a quality control unit which will eventually serve the entire laboratory.

Microbiologists attended CDC courses in Atlanta on "Principles and Bacterial Application of Fluorescent Antibody Techniques" and "Laboratory Methods for Diagnosing Rabies." Another worker traveled to CDC for a week of bench training in rabies. Two supervisors attended a workshop at the central laboratory cosponsored by CDC and the Clinical Laboratory Administration in "Health and Medical Laboratory Management."

Personnel consisted of three Microbiologist IV's, five Microbiologist III's, five Microbiologist II's, two Microbiologist I's and two Laboratory Technician II's.

A Microbiologist II resigned in October and was replaced by a Microbiologist I.

Central Services

PURCHASING—The purchasing office is responsible for ordering and distributing all supplies and equipment used by the central and branch laboratories and for dispensing diagnostic supplies available to county health offices and the public.

In spite of inflationary increases of about 20 percent in most laboratory supplies, a concentrated program of careful planning and judicious purchasing has substantially reduced the amount expended on these items. The stockroom in the new laboratory building has been utilized to complement this more efficient service.

As part of a new cost accounting system for the Clinical Laboratory Administration and at the recommendation of management consultants from the Centers for Disease Control, a new record keeping system was initiated to provide a more accurate record of expenses.

The initiation of Purolator Courier service has expedited deliveries to the branches and various health departments at a savings.

The maintenance of the five-acre tract surrounding the new laboratory was accomplished by existing personnel and minimal investments in equipment and tools.

Other services administered through this office were janitorial services, mail pick-up and delivery, semiannual inventories of all accountable equipment, packaging and shipping specimens to the Centers for Disease Control and preparation and distribution of specimen containers statewide.

MEDIA—The media laboratory prepared some 300 different media and reagents this year. In addition to making all media used in the central laboratory, 475,980 Thayer-Martin plates were prepared and packaged for use in the statewide GC program. The number of Thayer-Martin plates increased by 9.4 percent over 1979. These plates accounted for 66 percent of the total volume of media prepared this year:

MEDIA AND REAGENTS DISTRIBUTED

Enteric Bacteriology	948 liters
General Bacteriology	429 liters
GC (Central Laboratory)	1,786 liters
Milk and Water	536 liters
Food Bacteriology	117 liters
CF	162 liters
Serology	1 liter
Mycology	208 liters
Regular TB	1,289 liters
Special TB	417 liters
Branch Laboratories (Thayer-Martin)	6,334 liters
Miscellaneous	57 liters
TOTAL VOLUME MEDIA	12,284 liters

SOLUTIONS DISTRIBUTED

FA	325 liters
Parasitology	202 liters
IFA	584 liters
Hypothyroid	7 liters
TOTAL VOLUME SOLUTIONS	1,118 liters

QUALITY CONTROL—A separate quality control section was established this year with the eventual goal of checking all media and reagents prepared in the media laboratory before they are released. To date 17 batches of Thayer-Martin plates and 213 batches of other bacteriology media have been checked, and 1,438 tests have been required. Samples of Thayer-Martin plates were sent to the Centers for Disease Control twice a month for additional quality control checking, and all samples were found to be acceptable.

WASHROOM—This section decontaminates, washes and sterilizes glassware and other laboratory equipment; over one million pieces of glassware were handled during the year. In addition 28,536 sterile milk and water sample bottles were prepared for statewide distribution, and 9,784 dilution blanks were made for use in the milk testing program.

ANIMAL HOUSE—Animal house personnel weaned 5,585 mice during the year. The Birmingham Branch Laboratory was given 520 pregnant females and 650 males, and 630 mice were given to Auburn University and Huntingdon College. A total of 190 cages was set up for the TB, bacteriology, rabies and FA laboratories. Animal house workers assisted in the inoculation and harvesting of 2,695 rabies-infected and normal mice for the rabies section. Brains were removed from animal heads for rabies examination on a routine basis.

OTHER ACTIVITIES—One microbiologist from the media laboratory and one employee from purchasing attended a workshop in Health and Medical Laboratory Management, conducted by consultants from the Centers for Disease Control in cooperation with the Clinical Laboratory Administration.

Personnel for this division included one Microbiologist V, one Microbiologist IV, one Microbiologist II, one Microbiologist I, two Clerk Typist II's, one Clerk Stenographer I, one Laboratory Technician III, four Laboratory Technician II's, seven Laboratory Technician I's, six Laboratory Aide II's and five laborers.

Clerical Division

Over 582,898 reports were mailed from the central laboratory in 1980. Handling the telephone switchboard, typing and mailing reports, maintaining personnel records and numerous other clerical functions were carried out by one Clerk IV, one Clerk Stenographer III, two Clerk Typist III's, two Clerk III's, three Clerk Stenographer II's, six Clerk Typist II's, three Clerk Typist I's and one Clerk I.

Serology Division

SYPHILIS SEROLOGY—The VDRL slide test for syphilis was performed on 73,207 blood specimens and 1,697 spinal fluids. In addition quality control testing was performed on reagents before distribution to branch laboratories. This section continued to serve as a reference laboratory for the Centers for Disease Control and the states of Florida and Tennessee for the Rapid Plasma Reagin Card test (RPR), the VDRL slide test, the Fluorescent Treponemal Antibody-Absorption Test (FTA-ABS) and the microhemagglutination assay for *Treponema pallidum* (MHA-TP.)

COMPLEMENT FIXATION TEST—A complement fixation test for histoplasmosis (both mycelial and yeast phases), blastomycosis and coccidioidomycosis was performed on 2,025 specimens. Those showing a titer of 1:8 or above were:

Histoplasma capsulatum

Mycelial	Yeast	Both
12	25	14

Blastomyces dermatitidis
29

Coccidioides immitis
24

All Antigens
5

B. dermatitidis & H. capsulatum
8

B. dermatitidis & H. capsulatum
Mycelial phase
5

B. dermatitidis & H. capsulatum
Yeast phase
21

B. dermatitidis, C. immitis & H. capsulatum
Yeast phase
1

C. immitis & H. capsulatum
1

C immitis & H. capsulatum
Yeast phase
1

A total of 1,162 paired serums was examined for antibodies to rickettsia and chlamydia and to respiratory, neurotropic, enteric and exanthem viruses. Results interpreted as compatible with recent infection (specimens showing a four-fold or greater rise in titer of the convalescent specimen over the acute specimens) were:

Influenza (Type B)	7
Adenovirus	1
Mycoplasma pneumoniae	33
Chlamydia Group	4
Respiratory Syncytial	4
St. Louis Encephalitis	4
Herpes hominis Group	10
Mumps Viral	3
Spotted Fever Group	11
Varicella	3
Cytomegalovirus	12
Rubeola Virus	4
TOTAL	96

Negative results were obtained on 462 paired serums, and 52 pairs were unsatisfactory.

Results suggesting involvement at some undetermined time but not necessarily in the current illness were:

Influenza A	147
Influenza B	35
Adenovirus Group	46
Mycoplasma pneumoniae	246
Chlamydia	18
Respiratory Syncytial	6
Parainfluenza (Type 2)	2
St. Louis Encephalitis	4
Mumps Soluble	3
Mumps Viral	26
Herpes hominis	199
Spotted Fever Group	6
Polio Type II	2
Rubeola	17
Varicella	13
Cytomegalovirus	70
TOTAL	840

Since obtaining convalescent specimens continued to be difficult, single serums were tested and titers only were reported through May 1980. A note accompanied these reports stating that no interpretation could be made of results of a single specimen.

Beginning in June 1980, the laboratory began testing only paired serums. Guidelines stating the criteria of acceptance for viral specimens were sent to all physicians and health care providers. The guidelines are in accordance with the Centers for Disease Control's policy of specimen acceptance and testing which requires that both acute and convalescent samples be submitted simultaneously for diagnostic viral testing. Specimens were tested against batteries of antigens. Examinations totaled 17,599.

Of 796 single specimens tested, 416 showed no titer and 23 were unsatisfactory. Titers obtained on 357 single serums are shown in the chart below.

The laboratory achieved 100 percent agreement and reproducibility on the Centers for Disease Control proficiency testing samples in viral and fungal serology.

HEMAGGLUTINATION TESTS—The hemagglutination inhibition test for rubella antibodies was performed on 254 paired serums and 18,119 single specimens. Five pairs showed a four-fold or greater rise in titer.

A fee of $4.00 per specimen was charged for routine baseline testing on samples from private physicians and laboratories.

The rubella hemagglutination inhibition procedure was performed on eight proficiency testing samples provided by the Centers for Disease Control. Results obtained were 100 percent in agreement and reproducibility.

A total of 97 specimens was examined by the hemagglutination inhibition procedure for the detection of antibodies to St. Louis encephalitis, eastern equine encephalitis, western equine encephalitis and yellow fever. Titers to St. Louis encephalitis were obtained on eight specimens.

This section, in cooperation with the Centers for Disease Control, instituted a new surveillance program for dengue fever.

The indirect hemagglutination test for amebiasis was performed on 409 specimens with positive results obtained on three specimens.

This section prepared 500 amebic serology kits for distribution and forwarded 1,607 specimens to the Centers for Disease Control.

MICROIMMUNODIFFUSION TESTING FOR HISTOPLASMOSIS AND ASPERGILLOSIS—During 1980, 2,034 serums were tested for *Histoplasma capsulatum* by the microimmunodiffusion test. Of the serums tested 161 produced positive results as follows:

M band only	131
M & H bands	30

The microimmunodiffusion test was also performed on 121 serums for Aspergillosis. A total of 11 positives was found which produced the following bands:

Aspergillus Species	**Number of Bands**
Aspergillus niger	7
Aspergillus flavus	1
Aspergillus fumigatus	10

TITERS ON SINGLE SERUMS

	1:8	1:16	1:32	1:64	1:128	1:256	1:512	1:1024
Influenza (Type A)	28	14	5	2				
Influenza (Type B)	2	3	4		1	2		
Adenovirus	18	4	1					
Mycoplasma pneumoniae	45	37	19	6	6	2	3	1
Chlamydia	10	10	7	4	2	1		
Eastern Equine Encephalitis								
Western Equine Encephalitis								
St. Louis Encephalitis		1						
Lymphocytic Choriomengitis								
Mumps Soluble	1							
Mumps Viral	4	2						
Herpes Simplex	9	48	37	19	1			
Cytomegalovirus	18	18	10	2	1			
Spotted Fever Group				3				
Rubeola	6	2						
Varicella	3		1	3				
Parainfluenza (Type 2)	1							
Respiratory Syncytial	1	1		1				

In the final four months of 1980 a parallel study was conducted comparing the complement fixation and immunodiffusion tests for the detection of *Blastomyces dermatitidis*. The findings of this study will result in the inclusion of the immunodiffusion test for *B. dermatitidis* in 1981.

BACTERIAL AGGLUTINATION TESTS—A tube agglutination test for brucella and/or tularemia was performed on 89 specimens during 1980. Two specimens were positive for brucella, and two specimens were positive for tularemia.

FLUORESCENT MICROSCOPY—The Fluorescent Treponemal Antibody-Absorption test (FTA-ABS) for syphilis was performed on 3,936 blood specimens, an increase of 9.5 percent over last year. A total of 60 percent was reactive.

The indirect immunofluorescence antibody test (IFA) for *Toxoplasma gondii* was run on 1,190 specimens with a positive rate of 13.4 percent.

A total of 76 human serum specimens was submitted to the Centers for Disease Control to be tested for IGM antibodies to *T. gondii*. In addition 13 animal specimens were referred to the Centers for Disease Control to be tested for IGG antibodies to *T. gondii*.

Special studies were performed on:

1. 46 specimens for IGM antibodies against *T. gondii;*
2. 49 specimens for *T. gondii* using the enzyme immunoassay (EIA) procedure;
3. 44 specimens for antibodies against Legionnaires' disease bacterium;
4. 220 specimens for antibodies to spotted fever and typhus group;
5. Herpes IFA kits submitted from several commercial sources.

METABOLIC TESTS—PKU SCREENING—A total of 100,525 blood specimens was tested by the Guthrie Inhibition Assay for phenylalanine, and five positives were found.

Results obtained in this program are summarized in the following tables:

PKU Specimens	**Number Tested**	**Positives**
Newborn (White)	32,574	4
Newborn (Black)	18,548	1
Four-Week (White)	32,473	
Four-Week (Black)	15,589	
Older Children	31	
Maternal	75	
Center for Development and Learning Disorders (CDLD), University of South Alabama Medical Center and Miscellaneous Repeats	133	
Slight Transient Elevations	57	
Borderline Elevations	80	
Baby Feeding Less Than 24 Hours	170	
Inadequate Bloods	413	
Dietary Follow-up	382	
TOTAL	100,525	5

Total positives since program began in 1964 were:

Newborn (White)	40
Newborn (Black)	2
Four-Week (White) First Test (Incidence 1 in 15,762 newborns)	2*
Older Children	5
Partlow (New Admissions)	3
TOTAL	52

*Six week old infant tested for the first time by the Clinical Laboratory Administration included in this figure

PKU CHEMISTRY—A total of 677 tests was performed on 238 blood and urine specimens from infants and older children referred from physicians throughout the state for amino acid screening.

Chemical determinations were made as follows:

Nitroprusside test for cystinuria and homocystinuria (Urine specimens)	79
Chromatography (Sulfanilic acid stained for histidine and urinary metabolites)	79
Chromatography (Ninhydrin stained for amino acid disorders)	238
Chromatography (Isatin and Ehrlich's stained for proline and hydroxyproline)	238

Ten fluorometric determinations were performed to confirm phenylalanine and tyrosine levels on the five PKU infants. (Three positives were detected and confirmed in one week).

This section received its first Centers for Disease Control proficiency testing samples in December of 1980.

NEONATAL HYPOTHYROID SCREENING—On February 1, 1980, neonatal hypothyroid screening was begun on a statewide basis. Some 100,946 specimens were tested on 51,122 infants. The nine positives found represent an incidence rate of 1/6,390.

Results were as follows:

T_4 (Thyroxine Level) Specimens	**Number Tested**	**Examinations**	**Cases Detected**
Newborn (White)	32,574	32,574	10*
Newborn (Black)	18,548	18,548	
Four-Week (White)	32,473	32,473	
Four-Week (Black)	15,589	15,589	
Low T_4 Repeats	1,762	1,762	
Inadequate Bloods and Unsatisfactory		13,535	
TSH (Thyroid Stimulating Hormone)		17,250	
TOTAL	100,946	131,731	10*

*Includes one infant with transient hypothyroidism.

Total newborns tested since program began in 1978:

Year	**Newborns**	**Cases Detected**	**Incidence**
1978	38,695	4	1/9,673
1979	50,834	10	1/5,083
1980	51,122	9	1/5,680
TOTAL	140,651	23	1/6,115

ABNORMAL HEMOGLOBIN SCREENING (INCLUDING SICKLE CELL ANEMIA)—The 58,169 specimens tested by electrophoresis for abnormal hemoglobin represent a 10.2 percent decrease from 1979.

Results are shown in the following table:

AA	50,307	86.2 percent
AS	4,473	7.6 percent
AC	1,387	2.4 percent
SS	65	.1 percent
SF	78	.1 percent
SC	73	.1 percent
AF	918	
A high F	345	
CC	20	
AE	4	
AI	2	
AG Philadelphia	22	
ASG	1	
A Mobile	2	
AO Arab	2	
AN Baltimore	2	
A Inkster	1	
AG + SE hybrid	1	
AG + beta thalassemia trait	2	
AS + GC hybrid	3	
AN Baltimore + beta thalassemia trait	1	
AD	7	
S-SN Baltimore	1	
AD Ibadan	1	
S + Fast Moving	1	
A + Fast Moving	3	
Non C	17	
Non S	41	
Thalassemias		
A + high A_2	15	
FA	8	
CA	7	
SA	18	
Repeats	75	
Unsatisfactory	265	
TOTAL	58,169	

Electrophoresis at an acid pH was performed on 7,621 specimens to distinguish other abnormal hemoglobins having the same mobilities as S and C at an alkaline pH.

Polypeptide chain involvement was determined by globin chain electrophoresis for 118 specimens.

Whole blood specimens were requested from patients having abnormal hemoglobins other than S or C, and these were sent to the University of Texas Medical School in Galveston or to the Centers for Disease Control (CDC) in Atlanta for confirmation and/or identification.

CYTOLOGY—Cervical and vaginal smears for early detection and prevention of cancer were submitted from 47 counties participating in the cancer detection program. On the 20,074 smears stained, screened and classified by the Papanicolaou method, the following results were reported:

CLASS	**NUMBER**
I	19,134
II	769
III	88
IV	26
V	2

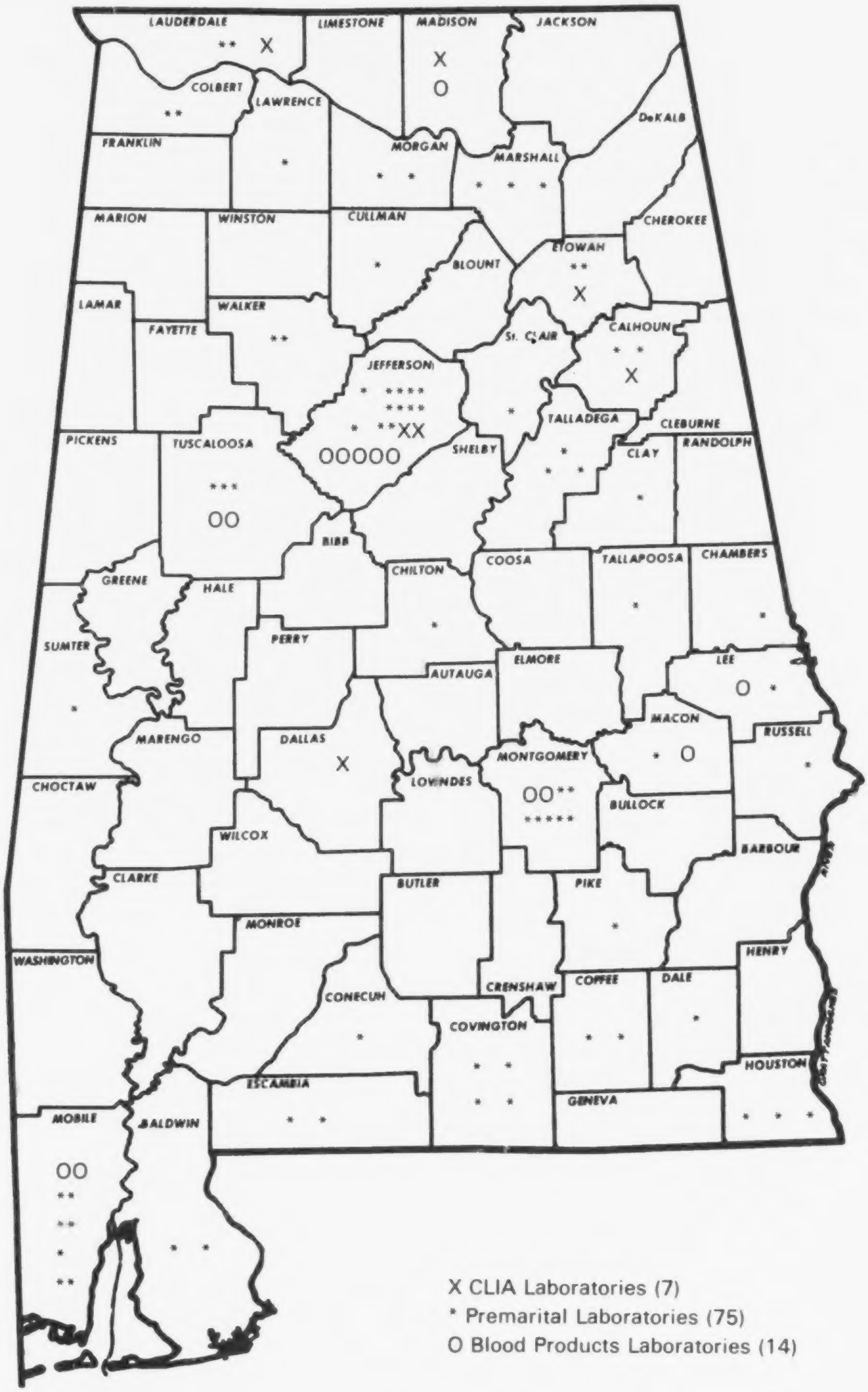
In addition to the cervical and vaginal smears, 109 smears of breast secretions were examined.

All smears categorized as Class II or above were referred to a pathologist for review, final diagnosis and recommendations. In addition 10 percent of all Class I smears were reviewed as a quality control measure.

Personnel in this section conducted a workshop for nurses in the Cancer Detection Program.

PREMARITAL APPROVAL AND PROFICIENCY—Laboratories requesting approval to perform premarital blood tests for syphilis were reviewed for certification as required in Title 22, Chapter 16, *Code of Alabama, 1975.* The central laboratory administered a proficiency testing program for the 98 Red Cross, blood banking and clinical laboratories performing these tests. In addition laboratories licensed under the Clinical Laboratory Improvement Act (CLIA) of 1967 for the performance of syphilis serology on an interstate basis were evaluated during the year.

The following map shows the distribution of laboratories certified in syphilis serology.


LAUDERDALE ** X
LIMESTONE
MADISON X O
JACKSON
COLBERT **
LAWRENCE *
FRANKLIN
MORGAN * *
MARSHALL * * *
DeKALB
MARION
WINSTON
CULLMAN *
BLOUNT
CHEROKEE
ETOWAH ** X
LAMAR
FAYETTE
WALKER **
St. CLAIR *
CALHOUN * * X
JEFFERSON * **** **** * **XX OOOOO
TALLADEGA * * *
CLEBURNE
PICKENS
TUSCALOOSA *** OO
SHELBY
CLAY *
RANDOLPH
BIBB
CHILTON *
COOSA
TALLAPOOSA *
CHAMBERS *
GREENE
HALE
SUMTER *
PERRY
AUTAUGA
ELMORE
LEE O *
MARENGO
DALLAS X
MACON * O
RUSSELL *
CHOCTAW
LOWNDES
MONTGOMERY OO** *****
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE *
MONROE
WASHINGTON
HENRY
CRENSHAW
COFFEE * *
DALE *
CONECUH *
COVINGTON * * * *
HOUSTON * * *
ESCAMBIA * *
GENEVA
MOBILE OO ** ** * **
BALDWIN * *

X CLIA Laboratories (7)
* Premarital Laboratories (75)
O Blood Products Laboratories (14)

CONTINUING EDUCATION—A microbiologist in the Serology Division served as training coordinator for the following workshops:

1. "Health and Medical Laboratory Management"—conducted by the Centers for Disease Control
2. Two Darkfield workshops—presented by state Venereal Disease Control personnel
3. "Gram Stains for Rapid Diagnosis of Gonorrhoeae"—sponsored by VD Control and conducted by laboratory microbiologists

Participants in these workshops included personnel from health departments, blood banks, hospitals and private laboratories. Qualified students were granted continuing education units (CEU's) under the A.S.C.P. Professional Acknowledgement of Continuing Education (P.A.C.E.) Program.

The Centers for Disease Control continued to furnish the laboratory with update materials including slides, tapes, study manuals and video tapes on various laboratory subjects. These materials were made available to laboratory and teaching personnel across the state.

OTHER ACTIVITIES—During the year microbiologists attended Centers for Disease Control courses in Atlanta on "Principles of Complement Fixation" and "The Serological Diagnosis of Dengue Fever," the latter in preparation for the addition of dengue fever testing to the surveillance program. Four microbiologists attended a field workshop conducted by the Centers for Disease Control in "Health and Medical Laboratory Management," and another took a course in the "Identification of Pathogenic Fungal Isolates by Immunodiffusion." A hemoglobin electrophoresis workshop sponsored by Helena Laboratories in Birmingham was also attended by a microbiologist from the Serology Division. Personnel in the cytology section were present at the Southern Association of Cytotechnologists' 20th annual meeting in Mobile, the I.A.C. tutorial at the University of Chicago, a workshop on pulmonary cytopathology at the University of Alabama in Birmingham and a workshop on non-gynecological specimens at Thomas Jefferson University in Philadelphia.

A microbiologist addressed the "Epidemiology and Disease Control Workshop" in Montgomery and the Alabama Public Health Association meeting in Mobile on the interpretation of laboratory reports, and another participated in a forum in Birmingham on "Management and Follow-up of PKU and Hypothyroid Infants."

Workers in this division participated in a field evaluation study of the Ames Corporation Sera-Tek MHA-TP test.

The Student Coalition for Community Health held its annual fairs in Alexander City, Ranburne and Forkland, Alabama. The laboratory assisted by providing supplies and consultation, by screening 587 specimens for abnormal hemoglobins, and by performing 1,207 VDRL slide tests for syphilis.

The Serology Division served the Centers for Disease Control as a reference laboratory for hemoglobinopathies, rubella, febrile agglutinations, RPR and MHA-TP procedures.

Personnel consisted of one Microbiologist IV, five Microbiologist III's, six Microbiologist II's, nine Microbiologist I's, one Laboratory Technician III, two Laboratory Technician I's and one Laboratory Aide II.

Tuberculosis and Mycology Division

MYCOBACTERIOLOGY—A total of 31,189 specimens for tuberculosis examinations was received in 1980, reflecting a 12.69 percent decrease from last year. The table below gives a breakdown of examinations and results.

TUBERCULOSIS SPECIMENS EXAMINED

Total specimens			31,189
Microscopic smears		29,791	
Positive	1,043		
Negative	28,748		
Cultures for confirmation		926	
Unsatisfactory specimens		472	
Total cultures			30,717
Positive		2,262	
Negative		25,452	
Unsatisfactory contaminated		1,646	
Mycobacteria not *M. tuberculosis**		1,339	
Nocardia asteroides		16	
Nocardia brasiliensis		2	

*Only 537 of these cultures were suspected pathogens and were identified as follows

M. kansasii	25
M. marinum	1
M. scrofulaceum	8
M. szulgai	1
M. avium—M. intracellulare complex	439
M. chelonei subspecies *abscessus*	41
M. fortuitum	22

Special tests performed for identification:

Niacin tests, to differentiate *M. tuberculosis*		800
Subcultures, biochemical and serological test		21,047
Drug susceptibility test (27.8 percent increase)		1,186
Direct tests	238	
Indirect tests	948	

MYCOLOGY—The 4,335 specimens received by the mycology section represent a 12.35 per cent decrease from last year. The following pathogenic, or possible pathogenic, fungi were identified:

PATHOGENIC OR POSSIBLE PATHOGENIC FUNGI IDENTIFIED

Blastomyces dermatitidis	10
Coccidioides immitis	3
Cryptococcus neoformans	15
Cryptococcus albidus	2
Cryptococcus laurentii	1
Cryptococcus uniguttulatus	1
Histoplasma capsulatum	17
Sporothrix schenckii	6
Nocardia asteroides	10
Nocardia brasiliensis	2
Cladosporium carrionii	2
Petriellidium boydii	5
Exophiala (Phialophora) jeanselmei	8
Fonsecaea pedrosoi	4
Phialophora verrucosa	2
Candida albicans	113
Candida guillermondii	2
Candida krusei	12
Candida parapsilosis	30
Candida pseudotropicalis	7
Candida stellatoidea	1
Candida tropicalis	96
Torulopsis glabrata	40
Trichosporon cutaneum	13
Geotrichum candidum	17
Aspergillus fumigatus	14
Aspergillus flavus	23
Aspergillus nidulans	29
Aspergillus niger	16
Aspergillus terreus	6
Rhizopus oryzae	2
Microsporum canis	5
Microsporum gypseum	3
Microsporum nanum	2
Epidermophyton floccosum	1
Trichophyton mentagrophytes	5
Trichophyton rubrum	41
Trichophyton schoenleinii	1
Trichophyton tonsurans	20

OTHER ACTIVITIES—The mycology section served as a reference laboratory for the Centers for Disease Control and the New York City Public Health Laboratory in their proficiency testing programs. This year the Centers for Disease Control sent no proficiency testing samples in mycobacteriology.

Participation in the International Working Group on Mycobacterial Taxonomy Open-ended Study on Slowly Growing Mycobacteria continued this year. At this time, 53 unknown cultures have been received. A manuscript has been prepared of the results on the first series of these cultures and will be published soon.

The cooperative study with the Centers for Disease Control on the primary drug resistance was continued this year. To date 1,000 primary tuberculosis cultures have been forwarded to the Centers for Disease Control for this study.

This laboratory is cooperating with Baptist Medical Center of Montgomery in giving bench training to its students in medical technology. The training includes diagnostic methods for tuberculosis and mycology.

In the past drug sensitivity testing for TB was done only on request. Beginning this year sensitivity testing against eight drugs is routinely performed on all primary isolation of *Mycobacterium tuberculosis*. For active cases these tests are repeated every three months.

The personnel consisted of one Microbiologist V, one Microbiologist IV, three Microbiologist III's, five Microbiologist II's, one Microbiologist I, one Laboratory Technician III and two Laboratory Technician I's. One microbiologist retired and was not replaced.

Birmingham Branch Laboratory

The Birmingham Branch Laboratory performed 355,402 examinations on 290,087 specimens this year. These examinations included the following:

1. 73,955 VDRL slide tests for syphilis—a 50 percent decrease from 1979;
2. 175,338 cultures for *Neisseria gonorrhoeae*—a 35 percent increase over last year;
3. 12,993 dairy samples—an increase of 20 percent. Of these 14 were found to contain inhibitory substances;
4. 26,937 water samples—a 96 percent increase;
5. 817 animal brains for rabies FA tests—a 27 percent increase. Five positive bats were found.

The state laboratory evaluation officer for milk and dairy products is the microbiologist in charge of the sanitary bacteriology section. This section prepared and submitted split milk proficiency testing samples to all state milk laboratories. The evaluation officer surveyed and certified 31 analysts and ten laboratories for water analyses, and 14 analysts and three laboratories for both milk and water analyses. In addition he attended the Alabama Dairy Conference, the National Shellfish Sanitation Program Workshop and the FDA Region IV Grade A PMO Conference.

Another microbiologist attended a workshop conducted by the Centers for Disease Control on indirect fluorescent antibody (IFA) procedures. Six microbiologists attended supervisors workshops; seven attended technical seminars; and 14 employees attended a two-day workshop and received certification in CPR.

The laboratory participated in proficiency testing by receiving check samples in rabies, *Neisseria gonorrhoeae*, syphilis serology, dairy products and fluoride analysis for waters.

The laboratory occupied its new facility located within the new Jefferson County Health Department building on May 12, 1980. All sections were successfully relocated in a period of two days with no loss of laboratory services. The new facility is approximately 13,000 square feet—twice the size of the old laboratory. This laboratory presently serves 22 counties as opposed to six counties served for most of 1979.

Personnel included one Microbiologist V, one Microbiologist IV, four Microbiologist III's, four Microbiologist II's, two Microbiologist I's, three Laboratory Technician III's, one Laboratory Technician II, three Laboratory Technician I's, one Laboratory Aide II, one Laboratory Aide I and two Clerk Typist II's.

Decatur Branch Laboratory

The Decatur Branch Laboratory performed 135,252 tests on 98,161 specimens this year. These examinations included the following:

1. 36,092 VDRL slide tests for syphilis—a 3.2 percent decrease from last year;
2. 12,719 Rh tests—an increase of 594 percent;
3. 24,638 *Neisseria gonorrhoeae* cultures—173 percent increase over 1979 (of these 1,961 [8 percent] were positive);
4. 16,737 public and private water samples—62.8 percent more than 1979;
5. 7,314 milk and dairy samples—a 74.8 percent increase;
6. 564 fluorescent antibody tests for rabies—an 88.6 percent increase.

The following rabies positives were reported:

Skunk	18
Bat	2
Cat	1
TOTAL	21

—a 91 percent increase in positives.

In 1980 the Decatur Branch Laboratory continued to participate in the proficiency testing programs for milk analysis, syphilis serology, *Neisseria gonorrhoeae* and rabies detection. Further the laboratory examined Rh factor check specimens sent by the Centers for Disease Control.

In other activities laboratory personnel lectured to Calhoun Junior College microbiology classes and conducted tours of the laboratory. The director and one other microbiologist attended a supervisory training workshop sponsored by the Alabama Department of Public Health.

Personnel consisted of one Microbiologist IV, one Microbiologist III, three Microbiologist II's, one Laboratory Technician II, one Laboratory Technician I, one Laboratory Aide I and one Clerk Typist I.

Dothan Branch Laboratory

The Dothan Branch Laboratory performed 23,494 tests on 18,340 specimens in 1980. These examinations included the following:

1. 9,271 *Neisseria gonorrhoeae* cultures of which 744 (8 percent) were positive—a 3 percent decrease in total specimens and a 11.6 percent decrease in positives;
2. 2,159 dairy samples—a 2 percent decrease from 1979. Of these, 14 were found to contain inhibitory substances;
3. 6,910 water samples from public and private sources—a 1 percent decrease from last year.

In addition 329 animal heads were shipped to the central laboratory for rabies testing.

This laboratory participated in a cooperative study of *Bacillus subtilis* and *Bacillus stearothermophilus* in tests for inhibitory substances in milks, as well as in a study to determine the shelf life of water sample bottles.

In other activities personnel from the Dothan Branch Laboratory assisted the Environmental Health Administration Laboratory in setting up the portable multichannel analyzer used during a "radiation emergency," received check specimens in both GC and milks, conducted a tour for students from the Area Vocational School and participated in the summer CETA program.

Personnel consisted of one Microbiologist II, one Laboratory Technician II and one Laboratory Technician I.

Mobile Branch Laboratory

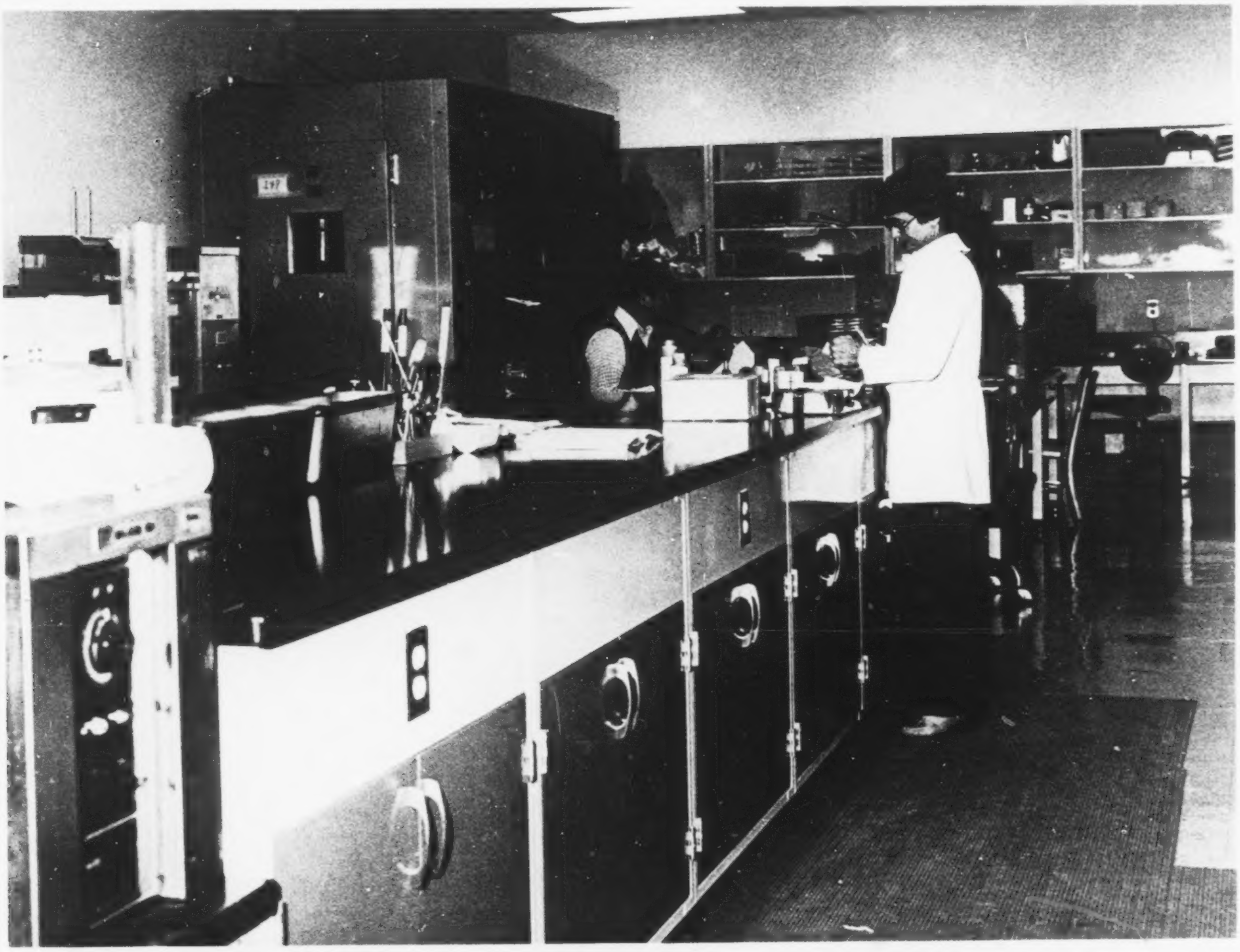
The Mobile Branch Laboratory performed 146,076 tests on 115,601 specimens. These examinations included the following:

1. 246 oyster and crabmeat samples and 68 bay waters—a 7.8 percent increase in shellfish and a 73.8 percent decrease in bay waters;
2. 41,308 VDRL slide tests for syphilis—a 31 percent decrease from last year;
3. 56,145 *Neisseria gonorrhoeae* cultures—an 11.6 percent increase over 1979. Of these 6 percent were positive;
4. 3,944 dairy samples—a 33 percent increase;
5. 13,560 water samples from public and private sources—a 1.4 percent increase;
6. 222 animal brains for rabies. No positives were found and the total specimens received decreased by 13 percent from 1979.

In other activites the Mobile Branch Laboratory received proficiency testing specimens in rabies, *Neisseria gonorrhoeae,* syphilis serology, milk testing and water testing. This laboratory continued its involvement in a Food and Drug Administration research project in shellfish testing procedures, and the shellfish section was certified by a representative from the U.S. Public Health Service.

One microbiologist attended a workshop in "Health and Medical Laboratory Management," and two microbiologists attended a supervisory training workshop sponsored by the Alabama Department of Public Health.

Personnel consisted of one Microbiologist IV, five Microbiologist II's, three Microbiologist I's, two Laboratory Technician I's, one Laboratory Aide I and two Clerk Typist II's.



LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Combined

REPORT FOR PERIOD Annual 1980

				SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC								
Cytology				20,074				20,664
STS	VDRL-Routine	WR	2,981	190,033	5,847	179,666	1,402	201,117
	VDRL-Premarital	WR	468	34,489	348	33,400	275	35,451
	VDRL-CSF			1,697	5	1,667	25	1,684
	Total Protein-CSF			1,697	244	470	983	1,076
Agar Gel				2,174	172	1,983	19	2,155
Bacterial	Agglutination			89	4	103		117
CF	Viral, Rickettsial			3,573				17,599
	Fungal			2,025				8,100
HI	Rubella-Influenza-SLE-Dengue			18,764				19,105
IHA	Amebiasis			409	2	406	1	408
IFA	FTA-ABS	B	77	3,936	2,384	1,424	51	4,125
	Toxoplasmosis			1,190	463	716	11	1,190
METABOLIC	Hemaglobinopathies			58,169				65,945
	PKU-Guthrie			100,525				100,525
	PKU-Chromatography			238				677
	Hypothyroid			100,946				131,731
Rh Factor				12,765			96	17,034
BACTERIOLOGY-FA								
Enteric				2,582	877	1,690	15	3,413
DAIRY				32,988			122	104,564
POTABLE WATER	Waters			81,509	7,698	68,878	4,928	121,245
	Residual Chlorine							78,136
	Fluorine			425				425
Bay Water				68				136
Shellfish				246				984
Food Bacteriology				148	4	142	1	197
General Bacteriology				1,273	995	169	79	2,497
GC Cultures				347,961	22,899	319,635	5,417	372,866
Parasitology				16,116	2,058	13,316	742	16,614
Rabies-FA				2,479	56	2,371	53	2,443
Staphylococcus				35	28	7		63
Diphtheria				23		22	1	22
Bordetella pertussis				106	65	41		106
TB-MYCOLOGY								
TB	Microscopic Smears			30,263	1,043	28,748	472	29,791
	Referred Cultures							
	Total Cultures			926	2,262	26,170	1,646	161,806
Mycology				4,335				39,582
MISCELLANEOUS	FDA Research Cultures (20)			61				61
	IP's - Mobile (41)							
CHECK SPECIMENS				797				1,905
TOTALS				1,075,134	47,454	681,024	16,339	1,565,559

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Montgomery

REPORT FOR PERIOD Annual 1980

			SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC							
Cytology			20,074				20,664
STS	VDRL-Routine	WR 1,644	64,394	2,716	59,272	762	69,221
	VDRL-Premarital	WR 224	8,813	133	8,352	104	9,226
	VDRL-CSF		1,697	5	1,667	25	1,684
	Total Protein-CSF		1,697	244	470	983	1,076
Agar Gel			2,174	172	1,983	19	2,155
Bacterial Agglutination			89	4	103		117
CF	Viral, Rickettsial		3,573				17,599
	Fungal		2,025				8,100
HI	Rubella-Influenza-SLE-Dengue		18,764				19,105
IHA	Amebiasis		409	2	406	1	408
IFA	FTA-ABS	B 77	3,936	2,384	1,424	51	4,125
	Toxoplasmosis		1,190	463	716	11	1,190
METABOLIC	Hemaglobinopathies		58,169				65,945
	PKU-Guthrie		100,525				100,525
	PKU-Chromatography		238				677
	Hypothyroid		100,946				131,731
Rh Factor							
BACTERIOLOGY-FA							
Enteric			2,582	877	1,690	15	3,413
DAIRY			6,399			120	21,376
POTABLE WATER	Waters		17,826	1,387	15,575	859	18,216
	Residual Chlorine						17,811
	Fluorine						
Bay Water							
Shellfish							
Food Bacteriology			148	4	142	1	197
General Bacteriology			1,273	995	169	79	2,497
GC Cultures			82,564	6,554	74,631	1,379	89,637
Parasitology			16,116	2,058	13,316	742	16,614
Rabies-FA			896	29	856	11	901
Staphylococcus			35	28	7		63
Diphtheria			23		22	1	22
Bordetella pertussis			106	65	41		106
TB-MYCOLOGY							
TB	Microscopic Smears		30,263	1,043	28,748	472	29,791
	Referred Cultures						
	Total Cultures		926	2,262	26,170	1,646	161,806
Mycology			4,335				39,582
MISCELLANEOUS							
CHECK SPECIMENS			430				1,007
TOTALS			552,635	21,425	235,760	7,281	856,587

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Birmingham

REPORT FOR PERIOD Annual 1980

		SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC						
Cytology						
STS	VDRL-Routine WR 619	56,334	951	54,411	353	58,186
	VDRL-Premarital WR 148	17,571	115	17,208	100	17,767
	VDRL-CSF					
	Total Protein-CSF					
Agar Gel						
Bacterial Agglutination						
CF	Viral, Rickettsial					
	Fungal					
HI	Rubella-Influenza-SLE-Dengue					
IHA	Amebiasis					
IFA	FTA-ABS B					
	Toxoplasmosis					
METABOLIC	Hemaglobinopathies					
	PKU-Guthrie					
	PKU-Chromatography					
	Hypothyroid					
Rh Factor						
BACTERIOLOGY-FA						
Enteric						
DAIRY		12,993				40,349
POTABLE WATER	Waters	26,490	3,232	21,161	2,097	50,446
	Residual Chlorine					24,848
	Fluorine	425				425
Bay Water						
Shellfish						
Food Bacteriology						
General Bacteriology						
GC Cultures		175,338	10,336	162,637	2,365	187,073
Parasitology						
Rabies-FA		807	5	793	9	798
TB-MYCOLOGY						
TB	Microscopic Smears					
	Referred Cultures					
	Total Cultures					
Mycology						
MISCELLANEOUS						
CHECK SPECIMENS		129				358
TOTALS		290,087	14,639	256,210	4,924	380,250

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Decatur

REPORT FOR PERIOD Annual 1980

				SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC								
	Cytology							
	STS	VDRL-Routine	WR 344	34,307	443	33,199	184	35,045
		VDRL-Premarital	WR 26	1,795	14	1,732	25	1,808
		VDRL-CSF						
		Total Protein-CSF						
	Agar Gel							
	Bacterial	Agglutination						
	CF	Viral, Rickettsial						
		Fungal						
	HI	Rubella-Influenza-SLE-Dengue						
	IHA	Amebiasis						
	IFA	FTA-ABS	B					
		Toxoplasmosis						
	METABOLIC	Hemaglobinopathies						
		PKU-Guthrie						
		PKU-Chromatography						
		Hypothyroid						
	Rh Factor			12,765			96	17,034
BACTERIOLOGY-FA								
	Enteric							
	DAIRY			7,493				23,751
	POTABLE WATER	Waters		16,716	1,763	13,880	1,073	31,928
		Residual Chlorine						15,769
		Fluorine						
	Bay Water							
	Shellfish							
	Food Bacteriology							
	General Bacteriology							
	GC Cultures			24,643	1,961	22,018	654	26,271
	Parasitology							
	Rabies-FA			564	22	521	22	543
TB-MYCOLOGY								
	TB	Microscopic Smears						
		Referred Cultures						
		Total Cultures						
	Mycology							
MISCELLANEOUS								
CHECK SPECIMENS				104				194
TOTALS				98,387	4,203	71,350	2,054	152,343

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Dothan

REPORT FOR PERIOD Annual 1980

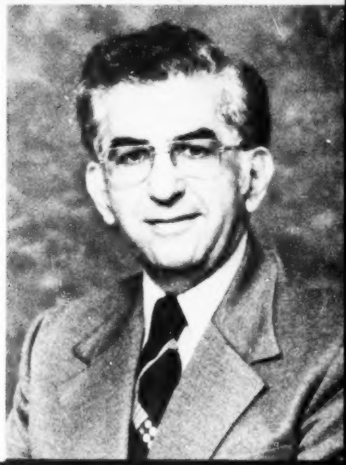
			SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC							
Cytology							
STS	VDRL-Routine	WR					
	VDRL-Premarital	WR					
	VDRL-CSF						
	Total Protein-CSF						
Agar Gel							
Bacterial Agglutination							
CF	Viral, Rickettsial						
	Fungal						
HI	Rubella-Influenza-SLE-Dengue						
IHA	Amebiasis						
IFA	FTA-ABS	B					
	Toxoplasmosis						
METABOLIC	Hemaglobinopathies						
	PKU-Guthrie						
	PKU-Chromatography						
	Hypothyroid						
Rh Factor							
BACTERIOLOGY-FA							
Enteric							
DAIRY			2,159				7,084
POTABLE WATER	Waters		6,910	506	6,119	285	6,625
	Residual Chlorine						6,693
	Fluorine						
Bay Water							
Shellfish							
Food Bacteriology							
General Bacteriology							
GC Cultures			9,271	744	8,327	200	9,785
Parasitology							
Rabies-FA							
TB-MYCOLOGY							
TB	Microscopic Smears						
	Referred Cultures						
	Total Cultures						
Mycology							
MISCELLANEOUS							
CHECK SPECIMENS			43				75
TOTALS			18,383	1,250	14,446	485	30,262

LABORATORIES
ALABAMA DEPARTMENT OF PUBLIC HEALTH

LABORATORY Mobile

REPORT FOR PERIOD Annual 1980

			SPECIMENS	POSITIVES	NEGATIVES	UNSAT.	EXAMS
SEROLOGY-CYTOLOGY-METABOLIC							
Cytology							
STS	VDRL-Routine	WR 374	34,998	1,737	32,784	103	38,665
	VDRL-Premarital	WR 70	6,310	86	6,108	46	6,650
	VDRL-CSF						
	Total Protein-CSF						
Agar Gel							
Bacterial	Agglutination						
CF	Viral, Rickettsial						
	Fungal						
HI	Rubella-Influenza-SLE-Dengue						
IHA	Amebiasis						
IFA	FTA-ABS	B					
	Toxoplasmosis						
METABOLIC	Hemaglobinopathies						
	PKU-Guthrie						
	PKU-Chromatography						
	Hypothyroid						
Rh Factor							
BACTERIOLOGY-FA							
Enteric							
DAIRY			3,944			2	12,004
POTABLE WATER	Waters		13,567	810	12,143	614	14,030
	Residual Chlorine						13,015
	Fluorine						
Bay Water			68				136
Shellfish			246				984
Food Bacteriology							
General Bacteriology							
GC Cultures			56,145	3,304	52,022	819	60,100
Parasitology							
Rabies-FA			212		201	11	201
TB-MYCOLOGY							
TB	Microscopic Smears						
	Referred Cultures						
	Total Cultures						
Mycology							
MISCELLANEOUS	FDA Research Cultures (20) IP's (41)		61				61
CHECK SPECIMENS			91				271
TOTALS			115,642	5,937	103,258	1,595	146,117



Naseeb L. Shory, D.D.S., M.P.H.

BUREAU OF DENTAL HEALTH

Even with continuing fiscal problems, the Bureau of Dental Health managed to maintain a comprehensive, well-rounded dental health program. Although the scope of activities was slightly reduced, innovations and high quality programs continued.

The dental health education programs especially had new efforts in high school and nursing home programs. Also the bureau initiated an occlusal sealant program.

DENTAL HEALTH EDUCATION FOR THE HANDICAPPED—Children reached through these special programs included the mentally and physically retarded at McInnis School in Montgomery. The bureau presented two workshops, training the teachers to use some very specific techniques when developing a dental education and oral hygiene program for their special children. Training included diet and nutrition counseling, adopting special brushing aids for children with motor reflex disorders and discussing how drugs, which many of the special children must take, contribute to gingival hyperplasia.

Other special school programs included New Life School for Cambodian refugee children. These children were presented toothbrushes and were given instructions in brushing procedures. Although these children could not speak English, they were receptive and eager to learn.

The Eufaula Correctional Center was the site of another program which was developed especially for the students of this facility. Many of these students have serious emotional and behavioral problems. The program was geared toward helping these teenage boys and girls develop and improve their social awareness and skills, subsequently improving their personal hygiene.

The Salvation Army also requested a dental health education program for a group of indigent teenage girls whom they sponsor. These young girls, ranging in age from nine through sixteen, were given toothbrushes and dental floss. They were given brushing and flossing instructions and diet and nutrition counseling.

The bureau hopes to expand on a program for the handicapped. This program is planned to reach the 22,000 mentally and physically handicapped Alabamians.

The special educational programs thus far have reached a total of 250 special children and 24 special education teachers.

The nursing home program and special dental health education programs have reached a grand total of 1,160 in the last five months of 1980.

These two groups, the elderly and handicapped, have had their share of difficulty acquiring dental treatment. Through educational programs the bureau hopes to direct these special groups of people toward better dental health by expanding their dental knowledge and the dental knowledge of those who contribute to their care.

DENTAL OCCLUSAL SEALANTS—Through a Dental Demonstration Project Grant from the Bureau of Maternal and Child Health, the Bureau of Dental Health began developing a preventive dentistry program using adhesive sealants. Sealants are applied to the chewing surfaces of teeth by dentists. The service will be provided at various school sites on a portable basis. Determining locations, designing literature and preliminarily examining students have been completed. Pike County children have been selected to be the first recipients of this program in 1981.

Programs presently in operation in Lexington, Kentucky, and Tallahassee, Florida, were used as models for the planning.

FLUORIDATION—The fluoridation of public water supplies continued to gain support in 1980. This was also a year in which Alabama's population receiving fluoridated water increased to approximately 1,664,000. Eight additional systems passed an ordinance or resolution to begin fluoridation. These systems are Loxley, Orange Beach, Silver Hill, Bay Minette, Hurtsboro, Reform, Wedowee and Coker.

During 1979 a record number of 19 systems approved fluoridation. These systems were expected to begin adding fluoride to their water supply by the end of 1980; however because of the late arrival of some of the equipment, a change in a system's certified operator status and a variety of other reasons, only five systems began fluoridation—Bay Minette, Luverne, Pell City, Guin and Winfield. It is anticipated that Birmingham, Prattville, Greensboro, Monroeville, Lineville and Ashland will be in operation before April 1, 1981. The remaining systems should be in operation soon thereafter.

Federal grant funds totaling $199,723 were received to pay for the equipment and a one-year supply of chemical for those systems that have met the requirements to fluoridate and need the financial aid.

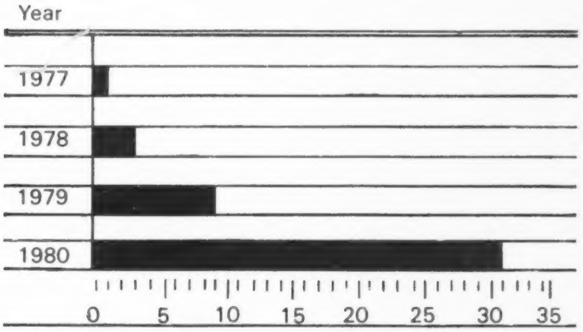
FLUORIDE MOUTHRINSE PROGRAMS—Alabama's school-based fluoride mouthrinse programs are presently serving 30,707 children and teachers in areas that do not have natural or community fluoridation. This program which is geared to prevent dental caries experienced a 330 percent increase over last year.

The in-school preventive procedure is simple. Once a week under supervision the children in grades K-6 rinse for one minute with a 0.2 percent solution of neutral sodium fluoride. For an average class to conduct the procedure, only five minutes per week are required away from the school's academic program.

PARTICIPATION IN FLUORIDE MOUTHRINSE PROGRAM

Year	Teachers	Students	School Systems
1977	26	550	1
1978	90	2,300	1
1979	387	8,908	7
1980	1,307	29,400	20

PARTICIPATION BY YEAR



Total number of participants in thousands

The program has grown from 8,908 children and 387 teachers participating in the program in 1979 to 29,400 children and 1,307 teachers participating in twenty school systems in 1980.

Results of research completed during the past ten years have shown that participants in the mouthrinse program will have about 35 percent fewer cavities than otherwise expected. The program is well accepted by the children, parents and school personnel. The fluoride mouthrinse program has also been found to be one of the most cost-effective dental health measures available today.

NURSING HOME DENTAL HYGIENE PROGRAM—During the latter half of 1980, a sincere effort to improve and expand training material for nursing home personnel was made. Practical and useful information needed by nursing home staff members so that they might master techniques necessary to provide oral hygiene care was added and improved upon.

This information covered all aspects of delivering oral hygiene care to long-term patients, both ambulatory and non-ambulatory. Helpful aids and special brushing techniques which could be used for stroke and arthritic patients were demonstrated and discussed.

Since it was evident that the elderly have a higher incidence of oral cancer, a slide/lecture session on cancerous oral lesions has been incorporated into the program. Each slide depicted a particular type of oral lesion; each one was described and discussed in detail.

The staff members were given a demonstration of techniques used when doing a soft tissue examination, and they were encouraged to give their patients examinations frequently and to report to their dental advisor for further treatment any tissue which appeared to be abnormal.

Because nursing home staff members must have appreciation for their own dental health and good oral hygiene, a laboratory plaque control session was conducted with the staff members. They were given complete instruction in proper brushing and flossing techniques to be used for themselves and for the patients they care for.

In the months since the nursing home program was expanded, seven programs have been presented to a total of 256 nursing home staff members, and a total of 630 patients have been reached by the program.

At a meeting of the Alabama Nursing Home Association in August of 1980, a pilot program was presented to 41 nursing home administrators from many different counties in the state. The bureau received favorable comments on the program and as a result subsequent programs have been scheduled for the coming year.

Division of Dental Services

During 1980 the bureau continued its efforts to expand dental services to additional counties. Progress was significantly affected when the mobile dental health unit operated by the bureau was involved in an accident which resulted in the unit's being out of service from April through December. The clinician assigned to this unit was relocated to Northwest Alabama Regional Health Department for four months of this period. He was able to assist that health department in reducing its large backlog of dental needs during his stay there.

Other major activities of the division were support and consultation given to 20 county dental operations. These programs continued to reach sizable numbers of indigent citizens and Medicaid eligibles although funding support has not increased in several years.

A decision was made in 1980 to convert the Smilemobile dental education vehicle into a combination treatment-prevention unit. The converted unit will replace the mobile dental health unit and is scheduled to begin service in early 1981. Extensive renovation was required on the Smilemobile. Equipment was salvaged from the wrecked mobile unit and several new items were added to make the vehicle more serviceable. The new mobile unit will now be able to offer a complete range of preventive and treatment services. Site locations are being selected, and close coordination with dental health education and dental demonstration projects will be emphasized on the unit.

Two full-time clinical dentists continued to provide the backbone of service from the division. One of the dentists was assigned to a three-county area and worked in permanent clinics at these sites. The other dentist was assigned to the mobile unit and was responsible for its schedule and operation. In addition there were 30 dentists employed on a part-time basis. Most of the dentists maintained their own private practice but wished to devote a portion of their work time to public health dental experiences. Through this avenue a considerable amount of service was provided to those who might otherwise be unable to afford treatment in a private office.

While dental services delivered in the clinics and mobile unit were comprehensive, major emphasis has always been placed on prevention of disease. The patient has been taught the importance of maintaining health versus the repair of disease. Fluoride treatments, prophylaxes, patient education, nutritional counseling and the new dental sealants were key features of the preventive treatment phase.

Before the accident the mobile dental health unit provided service in Chambers and Randolph counties as a portion of the Dental Demonstration Project. In more than two months of service in those counties, there were 390 patient visits with sixty children having all their dental needs met.

The clinician who normally worked from the mobile unit was able to provide 903 patient visits to the residents of Lauderdale County in Northwest Alabama Regional Health Department. During this time 267 children received complete treatment. Chart 1 details the services rendered to patients in Chambers, Randolph and Lauderdale counties.

In the county clinics which are primarily supported by the Bureau of Dental Health, there were 4,010 patient visits with the dental treatment of over 960 children completed. Chart 2 shows the variety and number of services provided in the other clinics around the state.

CHART 1
MOBILE DENTAL HEALTH UNIT PROJECTS
(CHAMBERS AND RANDOLPH COUNTIES)
LAUDERDALE COUNTY PROJECT, 1980

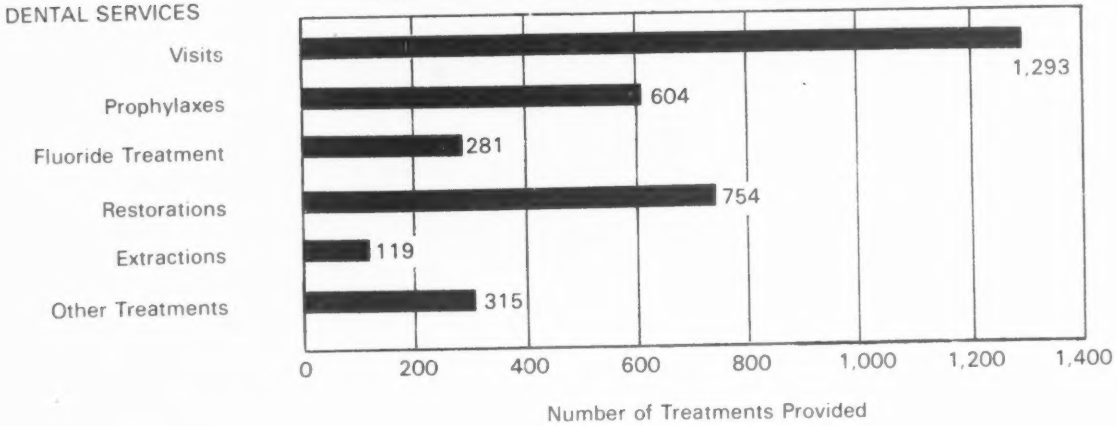
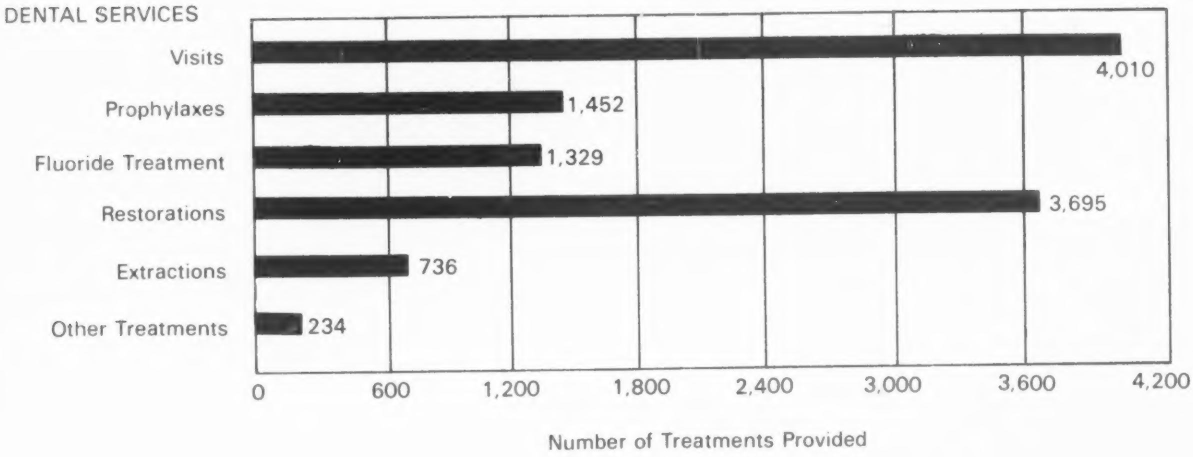


CHART 2
COUNTY DENTAL CLINIC SERVICES, 1980
(INCLUDES FOURTEEN COUNTIES)



Financial support and administrative assistance as requested is provided by the Division of Dental Services to the large full-time dental programs in Jefferson, Mobile, Tuscaloosa and Northwest Alabama regional health departments. The Bureau of Dental Health will continue to support these programs as resources permit. The bureau also seeks to serve as liason between these well-established programs and the smaller, developing programs to prevent costly duplication of planning and services.

Table 1 lists the part-time county programs, and the number of visits and selected services delivered in these locations.

TABLE 1
COUNTIES RECEIVING SUPPORT FROM BUREAU OF DENTAL HEALTH TO CLINICS

County	Patient Visits	Preventive Service	Restorative Service
Baldwin	251	106	219
Bullock	167	192	84
Butler	37	8	36
Calhoun	90	22	98
Coffee	30	14	43
Dale	102	64	60
DeKalb	173	69	115
Etowah	529	187	1,345
Jackson	528	316	558
Lee	761	1,003	275
Macon	636	533	293
Madison	72	28	19
Walker	352	204	478
Washington	282	35	70
TOTAL	4,010	2,781	3,695

Division of Education and Prevention

At the beginning of a new decade, this division can reflect on another prosperous year. Many goals were set and attained as existing programs expanded and new preventive programs materialized.

EDUCATION—The Alabama Smile Keeper (ASK) Dental Health Education (DHE) Program was received for the first time by eight Alabama school systems. In addition six school systems provided local input and were afforded a return visit by the ASK Program. Approximately 1,028 educators, trained by bureau staffers and local dental professionals, taught cognitive dental skills to 23,454 children in Head Start and elementary grades. Dental education consultants worked cooperatively with each of these systems, and oral hygiene kits and plaque-removal instructions were delivered to these program recipients.

Cumulative figures indicate that 92 of the 127 Alabama school systems have received ASK at least once and many twice. While records show that many districts have their own ongoing dental health programs, projected plans are to offer or present the ASK Program to the remaining systems by the 1981-82 school year.

DENTAL HEALTH EDUCATION
PROGRAM RECIPIENTS
1980

School System or Group	Number of Students	Number of Teachers
Chambers County*	3,400	141
Lanett City*	800	33
Sylacauga City	1,400	75
Cleburne County	1,600	65
Hale County*	817	16
Decatur City*	3,800	150
Russell County	2,400	140
Daphne Elementary School*	135	22
Florence City*	525	34
Winfield City	700	36
Marion City	3,182	120
Tallassee City	890	36
Perry County	1,439	62
Fort Rucker	1,600	80
Camp Exchange, Camp Ikhananchi	352	7
High School and Vocational Schools	414	11
1980 Total	23,454	1,028
1974-1979 Totals	213,321	8,683
GRAND TOTAL	236,775	9,711

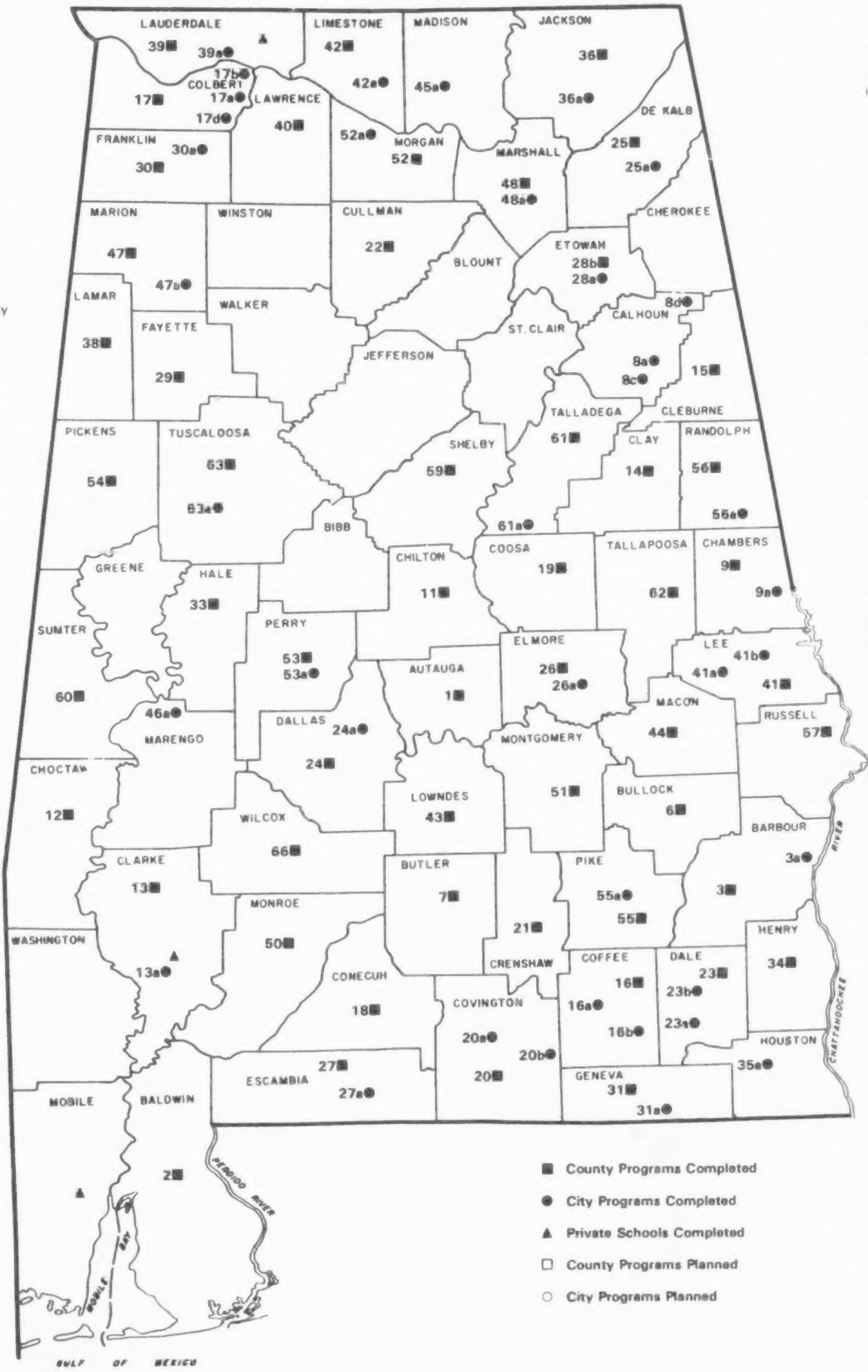
*Second Visit

The newly devised high school program was successfully introduced to two school systems. Also vocational school students and state junior college dental assistant students were trained and utilized in the elementary ASK Program and the fluoride mouthrinse program. An estimated 414 teenagers and 11 teachers acquired dental health education through this secondary level unit of study.

ASK TEACHER-TRAINING WORKSHOPS PRESENTED TO ALABAMA COUNTY AND CITY SCHOOL SYSTEMS

SCHOOL SYSTEM

1. Autauga County
2. Baldwin County
3. Barbour County
   a. Eufaula City
4. Bibb County
5. Blount County
   a. Oneonta City
6. Bullock County
7. Butler County
8. Calhoun County
   a. Anniston City
   b. Jacksonville City
   c. Oxford City
   d. Piedmont City
9. Chambers County
   a. Lanett City
10. Cherokee County
11. Chilton County
12. Choctaw County
13. Clarke County
    a. Thomasville City
14. Clay County
15. Cleburne County
16. Coffee County
    a. Elba City
    b. Enterprise City
17. Colbert County
    a. Muscle Shoals City
    b. Sheffield City
    c. Tuscumbia City
18. Conecuh County
19. Coosa County
20. Covington County
    a. Andalusia City
    b. Florala City
    c. Opp City
21. Crenshaw County
22. Cullman County
    a. Cullman City
23. Dale County
    a. Daleville City
    b. Ozark City
24. Dallas County
    a. Selma City
25. DeKalb County
    a. Fort Payne City
26. Elmore County
    a. Tallassee City
27. Escambia County
    a. Brewton City
28. Etowah County
    a. Attalla City
    b. Gadsden City
29. Fayette County
30. Franklin County
    a. Russellville City
31. Geneva County
    a. Geneva City
32. Greene County
33. Hale County
34. Henry County
35. Houston County
    a. Dothan City
36. Jackson County
    a. Scottsboro City
37. Jefferson County
    a. Bessemer City
    b. Birmingham City
    c. Fairfield City
    d. Homewood City
    e. Midfield City
    f. Mt. Brook City
    g. Tarrant City
    h. Vestavia Hills City
38. Lamar County
39. Lauderdale County
    a. Florence City
40. Lawrence County
41. Lee County
    a. Auburn City
    b. Opelika City
42. Limestone County
    a. Athens City
43. Lowndes County
44. Macon County
45. Madison County
    a. Huntsville City
46. Marengo County
    a. Demopolis City
    b. Linden City
47. Marion County
    a. Winfield City
48. Marshall County
    a. Guntersville City
49. Mobile County
50. Monroe County
51. Montgomery County
52. Morgan County
    a. Decatur City
    b. Hartselle City
53. Perry County
    a. Marion City
54. Pickens County
55. Pike County
    a. Troy City
56. Randolph County
    a. Roanoke City
57. Russell County
    a. Phenix City
58. St. Clair County
59. Shelby County
60. Sumter County
61. Talladega County
    a. Sylacauga City
    b. Talladega City
62. Tallapoosa County
    a. Alexander City
63. Tuscaloosa County
    a. Tuscaloosa City
64. Walker County
    a. Carbon Hill City
    b. Jasper City
65. Washington County
66. Wilcox County
67. Winston County
    a. Haleyville City


LAUDERDALE 39■ 39a● ▲
LIMESTONE 42■ 42a●
MADISON 45a●
JACKSON 36■ 36a●
COLBERT 17b● 17a● 17d● 17■
LAWRENCE 40■
DE KALB 25■ 25a●
FRANKLIN 30a● 30■
MORGAN 52a● 52■
MARSHALL 48■ 48a●
MARION 47■ 47a●
WINSTON
CULLMAN 22■
BLOUNT
CHEROKEE
ETOWAH 28b■ 28a●
LAMAR 38■
FAYETTE 29■
WALKER
ST. CLAIR
CALHOUN 8d● 8a● 8c●
JEFFERSON
15■
PICKENS 54■
TUSCALOOSA 63■ 63a●
SHELBY 59■
TALLADEGA 61■ 61a●
CLEBURNE
CLAY 14■
RANDOLPH 56■ 56a●
BIBB
GREENE
HALE 33■
CHILTON 11■
COOSA 19■
TALLAPOOSA 62■
CHAMBERS 9■ 9a●
SUMTER 60■
PERRY 53■ 53a●
AUTAUGA 1■
ELMORE 26■ 26a●
LEE 41a● 41b● 41■
MARENGO 46a●
DALLAS 24a● 24■
MACON 44■
RUSSELL 57■
MONTGOMERY 51■
CHOCTAW 12■
LOWNDES 43■
BULLOCK 6■
WILCOX 66■
BARBOUR 3a● 3■
CLARKE 13■ 13a● ▲
BUTLER 7■
PIKE 55a● 55■
21■ CRENSHAW
WASHINGTON
MONROE 50■
HENRY 34■
CONECUH 18■
COFFEE 16■ 16a● 16b●
DALE 23■ 23b● 23a●
COVINGTON 20a● 20b● 20■
HOUSTON 35a●
ESCAMBIA 27■ 27a●
GENEVA 31■ 31a●
MOBILE ▲
BALDWIN 2■
PERDIDO RIVER
MOBILE BAY
CHATTAHOOCHEE RIVER
GULF OF MEXICO
■ County Programs Completed
● City Programs Completed
▲ Private Schools Completed
☐ County Programs Planned
○ City Programs Planned

For the fourth consecutive year, consultants visited Camp Exchange, a camp for underpriviledged six to 14 year old boys and girls sponsored by the Montgomery Exchange Club and the Montgomery Police Department. Approximately 315 eligible campers were taught preventive concepts and were given personal oral hygiene supplies. Another 44 special children were reached as staffers visited Camp Ikhananchi.

Educational exhibits were presented at various health fairs and health-related conferences. Information was distributed at the Carver High School (Montgomery) Health Fair and a display was set up at a health education awareness seminar in Birmingham. Many persons were reached through these projects and the public were made more aware of services available.

Existing educational literature such as "Hilda the Happy Tooth" and "A Guide for Teaching Dental Health in Alabama Schools" was revised and upgraded. Two new brochures entitled "Don't Feed Tooth Decay to Your Baby" and "Education Prevents Dental Disease" were also produced in cooperation with the Alabama Dental Auxiliary and the Alabama Dental Foundation.

Parents, teachers, dental professionals, local health departments, nurses, auxiliary groups, charity leagues and other organizations continued to be most cooperative with and supportive of the BDH's accomplishments during 1980. These unified efforts have always been a basic structure of the ASK Program and hopefully such concerted actions can provide a healthier Alabama in the years ahead.

William T. Willis, M.S.

ENVIRONMENTAL HEALTH ADMINISTRATION

Environmental Health Laboratory

The Environmental Health Administration Laboratory provided analytical support for the divisions of the Environmental Health Administration, the Alabama Water Improvement Commission, the Alabama Air Pollution Control Commission and other health agencies on a case-by-case basis.

During 1980 the Environmental Health Administration Laboratory processed 7,860 samples for chemical and radiological parameters. These samples required a total of 27,703 determinations. Table 1 summarizes the monthly activities of the laboratory and the agencies requesting analytical support. Overall the 1980 work load was 20 percent lower than 1979. However the developing trends have been toward the more complex chemical and radiological analyses. Therefore the 20 percent decline in the number of determinations does not reflect an equal decline in the overall work load.

ANALYTICAL CAPABILITIES—Routine laboratory capabilities are listed on Table 2. This spectrum of analytical capabilities was expanded in 1980 to include the volatile organics and the acid-extractables of the "Priority Pollutant" list. More utilization of the Finnigan Model 4000 Series GC/MS Systems made these organic analytical capabilities possible.

Both federal and state legislation continued to expand the list of parameters to assess environmental quality. As these parameters have been added, the complexity of the instrumentation and the associated analytical methodology continued to increase.

The capability of the radiological section of the laboratory was improved in 1980 by the addition of a Victoreen Thermoluminescent Dosimetry Reader. This reader enabled the laboratory to provide the Division of Radiological Health with in-house capability to measure ionizing radiation.

QUALITY CONTROL—In-house quality control added approximately 10 percent to the overall work load during 1980. Most of this additional work was duplicate analyses. The remainder was divided between references, cross-check samples and special studies conducted by the United States Environmental Protection Agency.

The laboratory's effort as the certifying agency for laboratories analyzing drinking water samples continued in 1980. A report of this effort appeared in the December 1980 issue of *American Laboratory*.

TABLE 1
ENVIRONMENTAL HEALTH LABORATORY
WORK LOAD

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Air Pollution													
Number of Samples	48	14	49	23	21	25	20	11	6	8	21	22	268
Number of Determinations	118	32	119	47	43	45	23	11	6	8	21	42	515
Public Water Supplies													
Number of Samples	144	140	109	189	112	132	164	262	190	199	217	146	2,004
Number of Determinations	502	414	407	777	494	392	495	990	432	1,027	999	702	7,631
Radiological Health													
Number of Samples	67	35	41	77	50	47	63	33	43	242	30	36	764
Number of Determinations	178	58	62	148	85	58	211	53	73	623	42	61	1,652
Water Improvement Commission													
Number of Samples	247	252	218	247	280	213	252	425	399	268	168	195	3,164
Number of Determinations	853	658	542	889	719	530	594	1,052	1,452	729	522	549	9,089
Solid and Hazardous Waste													
Number of Samples	203	2	38	83	74	98	112	67	95	191	124	89	1,176
Number of Determinations	1,712	20	310	579	379	566	460	204	958	1,172	1,107	560	8,027
Water Miscellaneous													
Number of Samples	1												1
Number of Determinations	8												8
Highway Department Samples			*204										
Highway Department Determinations			*204										
WIC 208 Project Samples		6		15	77	11	6	8	71	50		35	279
WIC 208 Project Determinations		24		65	137	26	19	25	133	96		52	577
TOTAL SAMPLES	710	449	659	634	614	526	617	806	804	958	560	523	7,860
TOTAL DETERMINATIONS	3,371	1,206	1,644	2,505	1,857	1,617	1,802	2,335	3,054	3,655	2,691	1,966	27,703

*Included in Total

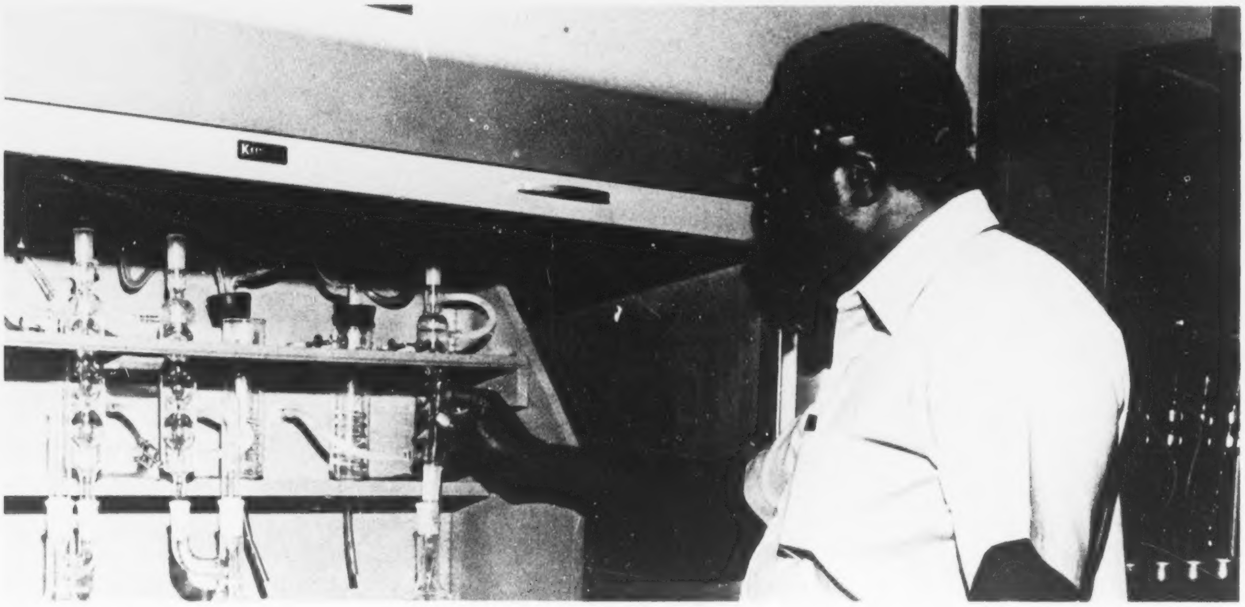


TABLE 2
ENVIRONMENTAL HEALTH ADMINISTRATION LABORATORY PARAMETERS

ORGANICS

I. Organochlorines
  1. Aldrin
  2. BHC (Lindane)
  3. DDD (o,p'; p,p')
  4. DDE (o,p'; p,p')
  5. DDT (o,p'; p,p')
  6. Chlordane
  7. Heptachlor
  8. Heptachlor Epoxide
  9. Methoxychlor
  10. Mirex
  11. Toxaphene
  12. PCB's (1016, 1254, 1260, 1262, 1248, 1232, 1242, 1221)
  13. Dieldrin
  14. Endrin
  15. 2,4-D
  16. 2,4,5-TP

II. Organophosphates
  1. Diazinon
  2. Methyl Parathion
  3. Ethyl Parathion
  4. Malathion
  5. Ethion
  6. Malathion

III. Volatile Organics
  1. Chloroform
  2. Bromoform
  3. Bromodichloromethane
  4. Chlorodibromomethane
  5. 1,2 Dichloroethane
  6. 1,1,1 Trichloroethane
  7. 1,1,2 Trichloroethylene
  8. Carbon tetrachloride
  9. 1,1,2,2 Tetrachloroethylene

INORGANICS

Minerals
pH
Alkalinity
Sulfide
Oil and Grease
Chloride
Fluoride
Turbidity
Color
Cyanide
Phenol
Hardness
Total Suspended Solids
Total Dissolved Solids
Total Solids
Total Organic Carbon
Acidity
Specific Conductance
Sulfates
Carbon Dioxide

Metals
Al
Ag
Ca
As
Cd
Cr-T
Cr-VI
Cu
Fe
Mn
Ni
Pb
Zn
Hg
Ba
Se
Na
Mg

Nutrients
1. Nitrate—Nitrite
2. Ammonia—Nitrogen
3. Organic—Nitrogen
4. Total Phosphates
5. Ortho—Phosphates

Demands
1. Biochemical Oxygen Demand
2. Chemical Oxygen Demand

Air
1. Air Sulfates
2. Air Stacks
3. Air Filter Lead

RADIATION

Gross Alpha
1. Air
2. Water
3. Soil
4. Vegetation

Gross Beta
1. Air
2. Water
3. Soil
4. Vegetation

Gamma
Bi—214
Ba—140
Co—60
Cs—134
Cs—137
Ce—144
I—131
K—40
Ru—106
Th—232
Zn—65
Zr-Nb—95

Liquid Scintillation
Tritium

Specific Alpha
1. Ra—226-228

Specific Beta
1. Sr—89 & 90
  a. Milk
  b. Water
  c. Soil
  d. Vegetation

Division of General Sanitation

The Division of General Sanitation reviewed and approved plans for on-site sewage disposal systems for subdivisions, schools, experimental projects and other special projects. Personnel in the division advised local environmentalists, engineers, architects and the general public on specific problems relating to on-site sewage disposal by ground absorption. Ongoing cooperative programs with federal, state and county agencies continued in the areas of subdivision review, school sanitation problems and alternative sewage disposal methods. In addition the division was given the responsibility of investigating complaints concerning vector control problems.

SUBDIVISION REVIEW PROGRAM—The division had three environmentalists who worked full time in the subdivision review program. In 1980 the staff reviewed and approved 198 preliminary subdivision submittals and 245 final subdivision submittals for a total of 543 separate subdivision reviews. Copies of approvals for subdivisions were sent to the appropriate agencies which included local health departments and federal lending or loan guarantee agencies such as the Veterans Administration, the Department of Housing and Urban Development and the Farmers Home Administration. These agencies have cooperated in an effort to maintain good sewage disposal practices in subdivisions. The number of subdivision approvals dipped again this year due to the sagging economic situation. The subdivision approval trends since 1970 can be seen on Graph 1.

In May of this year, the State Committee of Public Health delegated authority to the West Alabama District Health Department for primary enforcement of subdivision development within its district. The division will perform yearly audits of the West Alabama program beginning in the spring of 1981.

SCHOOL SANITATION PROGRAM—Plans for water supply, food service facilities and wastewater disposal systems were approved for 122 school projects during 1980. An additional 43 sets of plans were held over into 1981. The sale and release of $58 million in school construction bonds in the last months of the year accelerated plan submittal at the end of the year. Many of the projects held over into 1981 were schematic and preliminary plans submitted in anticipation of bond money release.

The 281 sets of plans reviewed by the school plan review section included 31 sets of schematic plans, 91 sets of preliminary plans and 159 sets of final plans.

OTHER PROJECTS—Approvals were granted for 10 armories and Organizational Maintenance Shops (OMS) and 13 other projects including prisons, recreational parks and small commercial buildings. Plans for eight projects were held over into 1981.

ALTERNATIVE ON-SITE SEWAGE DISPOSAL SYSTEMS—During 1980 there was a marked increase in interest for utilizing alternative on-site sewage treatment and disposal systems in areas where soils were unsuitable for conventional septic tank systems. As a result several applications for the use of such systems were submitted and approved. The small aerobic treatment tanks for sewage generated by individual residences occupied most of the interest which resulted in four new system distributors being certified by the State Health Department. Distributorships for the Multi-Flo, Jet and Brooks Anti-Septic sewage treatment systems were established during the year.

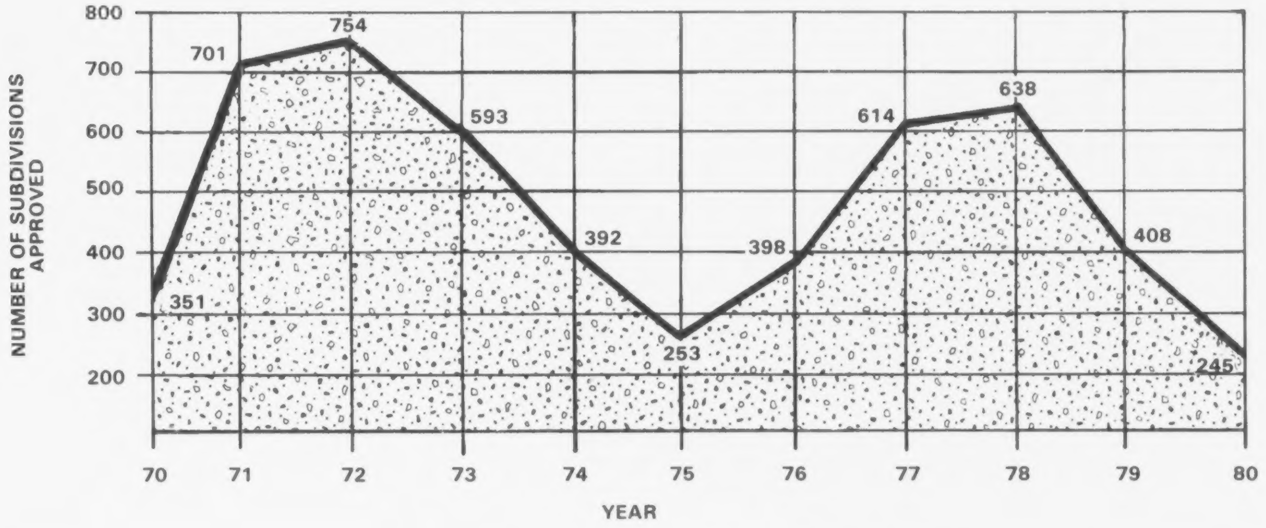
While most of the alternative sewage disposal systems introduced into the state in 1980 were centered around a higher degree of treatment of sewage, at least three new techniques were advanced related to the final disposal of the treated effluent by land application. One of these new techniques is the mound system. In this concept a specially prepared disposal bed is constructed above the natural ground surface to allow for adequate filtering and treatment of effluent prior to entry into poor soil conditions. Ten mound system approvals were granted by the division in 1980; however only three systems were actually installed by the end of the year. Two aerobic treatment plant systems utilizing spray irrigation as the final disposal technique were approved and installed. Three other aerobic treatment plant systems where final disposal of the treated effluent was by drip irrigation were approved. In the drip irrigation method, treated effluent is evenly distributed into the ground by being pumped under pressure through a subsurface network of small diameter plastic pipes.

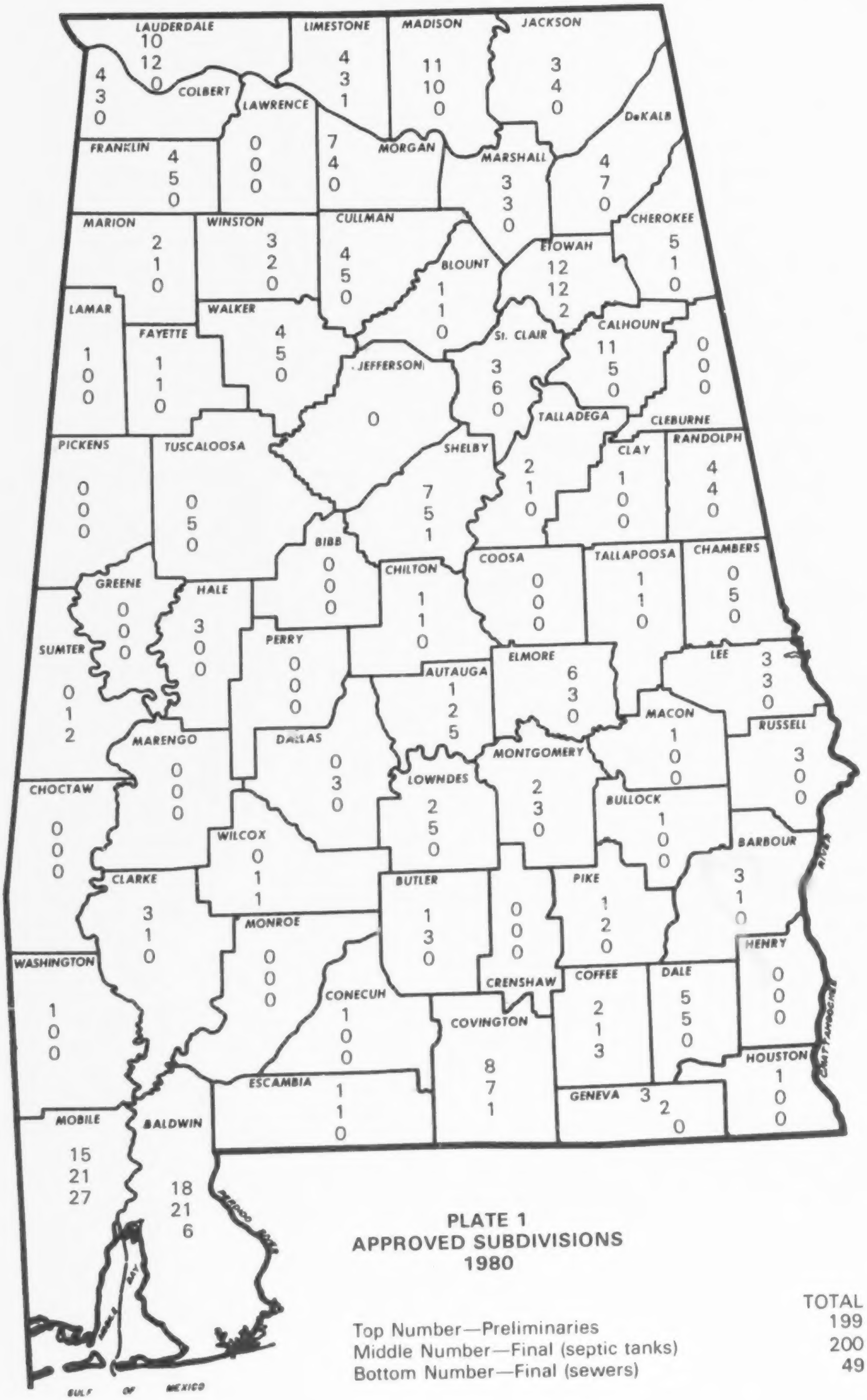
Several applications for the use of alternative on-site sewage disposal systems were denied during 1980 due to improper engineering design or adverse topography. It is anticipated that even more emphasis will be placed on the use of these new techniques for sewage disposal in 1981.

VECTOR CONTROL—During October of this year, the vector control program was transferred from the Division of Solid Waste and Vector Control to the Division of General Sanitation. One environmentalist was transferred with this program, but it continues to be understaffed and underfunded.

Limited advice and assistance were given to individuals, cities and counties on problems relating to mosquitoes, rats, bats and bird roosts.

GRAPH 1
SUBDIVISION APPROVAL TRENDS

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JACKSON 3 4 0
LAWRENCE 0 0 0
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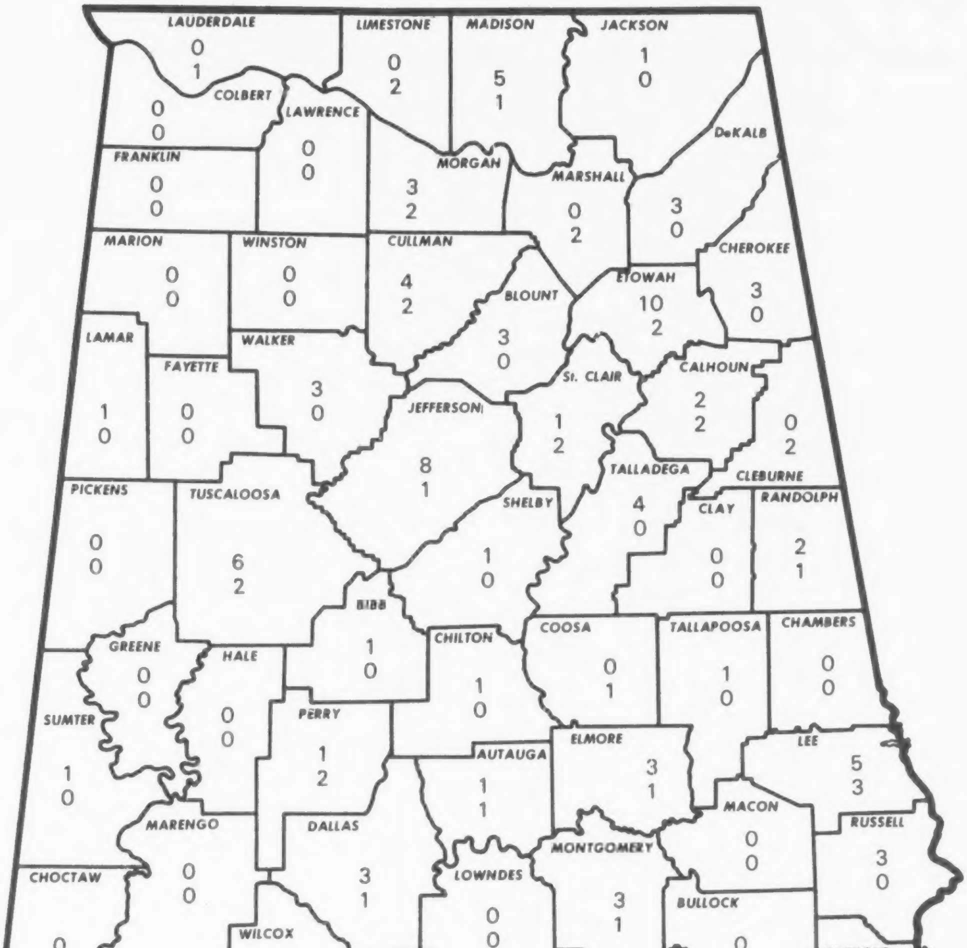
MARSHALL 3 3 0
DeKALB 4 7 0
MARION 2 1 0
WINSTON 3 2 0
CULLMAN 4 5 0
BLOUNT 1 1 0
ETOWAH 12 12 2
CHEROKEE 5 1 0
LAMAR 1 0 0
FAYETTE 1 1 0
WALKER 4 5 0
JEFFERSON 0
St. CLAIR 3 6 0
CALHOUN 11 5 0
CLEBURNE 0 0 0
TALLADEGA 2 1 0
CLAY 1 0 0
RANDOLPH 4 4 0
PICKENS 0 0 0
TUSCALOOSA 0 5 0
SHELBY 7 5 1
BIBB 0 0 0
CHILTON 1 1 0
COOSA 0 0 0
TALLAPOOSA 1 1 0
CHAMBERS 0 5 0
GREENE 0 0 0
HALE 3 0 0
SUMTER 0 1 2
PERRY 0 0 0
AUTAUGA 1 2 5
ELMORE 6 3 0
LEE 3 3 0
MACON 1 0 0
RUSSELL 3 0 0
MARENGO 0 0 0
DALLAS 0 3 0
LOWNDES 2 5 0
MONTGOMERY 2 3 0
BULLOCK 1 0 0
CHOCTAW 0 0 0
WILCOX 0 1 1
BARBOUR 3 1 0
CLARKE 3 1 0
BUTLER 1 3 0
CRENSHAW 0 0 0
PIKE 1 2 0
MONROE 0 0 0
HENRY 0 0 0
WASHINGTON 1 0 0
CONECUH 1 0 0
COFFEE 2 1 3
DALE 5 5 0
COVINGTON 8 7 1
ESCAMBIA 1 1 0
GENEVA 3 2 0
HOUSTON 1 0 0
MOBILE 15 21 27
BALDWIN 18 21 6
RIVER
CHATTAHOOCHEE
PERDIDO RIVER
MOBILE BAY
GULF OF MEXICO

PLATE 1
APPROVED SUBDIVISIONS
1980

	TOTAL
Top Number—Preliminaries	199
Middle Number—Final (septic tanks)	200
Bottom Number—Final (sewers)	49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MADISON
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JACKSON
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COLBERT
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LAWRENCE
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FRANKLIN
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MARSHALL
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DeKALB
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MARION
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WINSTON
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CULLMAN
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BLOUNT
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ETOWAH
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CHEROKEE
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LAMAR
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FAYETTE
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WALKER
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St. CLAIR
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CALHOUN
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CLEBURNE
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PICKENS
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SHELBY
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TALLADEGA
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CLAY
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RANDOLPH
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BIBB
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GREENE
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SUMTER
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MONROE
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HENRY
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WASHINGTON
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CONECUH
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COFFEE
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DALE
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COVINGTON
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ESCAMBIA
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GENEVA
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HOUSTON
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MOBILE
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BALDWIN
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CHATTAHOOCHEE
RIVER
PERDIDO RIVER
MOBILE BAY
GULF OF MEXICO

PLATE 2
APPROVED SCHOOL PROJECTS
1980

	TOTAL
Top Number—Plans approved	122
Bottom Number—Plans pending into 1981	43

Division of Inspection

GENERAL FOOD SANITATION—Food surveys and evaluations were made in 25 counties during 1980. The average rating for all food establishments was 81. The average program administrative score was 75. (Table 1 gives the breakdown by county.)

Surveys and evaluations were made by Division of Inspection personnel, standardized and certified by the U.S. Food and Drug Administration. Survey methods used were in accordance with procedures recommended by the Food and Drug Administration.

A total of 57 school surveys was made in 29 counties. The average rating for food service in schools was 87. The average program administrative score was 87. (Table 2 gives a breakdown by system.)

Division environmentalists continued to assist local health personnel in the proper interpretation and application of the recently revised food regulations. Technical assistance and guidance were also provided to local health units in the issuance of noncompliance notices and enforcement procedures.

Food recalls issued by the U.S. Food and Drug Administration were forwarded from the division office to all local health units with instructions for handling adulterated food products.

TABLE 1
COUNTY FOOD SURVEYS
1980

County	Numerical Score	Administrative Score
Autauga	87	76
Blount	84	94
Chambers	84	78
Colbert	85	81
Coosa	80	69
Cullman	87	82
Dale	74	61
Elmore	84	78
Franklin	77	78
Greene	86	95
Hale	70	74
Lamar	80	81
Lauderdale	82	81
Lawrence	82	23
Lee	82	80
Limestone	76	87
Macon	80	81
Madison	80	79
Marion	86	83
Marshall	78	63
Perry	64	57
Pickens	89	80
Russell	82	70
Tuscaloosa	88	83
Washington	79	65

Inspections made at food processing plants totaled 318, and inspections made at fish processing plants totaled 55. (Table 3 gives more details.)

The Alabama Commission on Aging requested assistance in developing contract specifications for the Nutrition for Elderly Program in Alabama. Division personnel provided consultative services to this agency and inspected and permitted eight food production centers at which all meals for the elderly were prepared. A total of 2,883,731 meals was served at 252 feeding sites during the year, and 6 percent of the total meals served were home delivered meals.

TABLE 2
SCHOOL SURVEYS
1980

System	Numerical Score	Administrative Score
Barbour County	82	86
Eufaula City	92	86
Blount County	88	89
Oneonta City	94	89
Bullock County	86	83
Chambers County	88	77
Lanett City	81	77
Cherokee County	77	83
Clarke County	79	88
Thomasville City	79	88
Clay County	87	80
Coffee County	94	95
Elba City	95	95
Enterprise City	94	95
Colbert County	92	88
Sheffield City	94	88
Muscle Shoals City	92	88
Tuscumbia City	91	88
Covington County	89	94
Andalusia City	87	95
Florala City	93	94
Opp City	93	94
Crenshaw County	88	83
Cullman County	96	92
Cullman City	92	90
Dale County	87	94
Ozark City	88	94
Daleville City	83	94
DeKalb County	85	84
Ft. Payne City	74	84
Elmore County	85	78
Franklin County	90	92
Russellville City	94	92
Geneva County	94	95
Geneva City	93	95
Henry County	92	93
Houston County	86	94
Dothan City	92	94
Lamar County	84	83

TABLE 2 (continued)
SCHOOL SURVEYS
1980

System	Numerical Score	Administrative Score
Lauderdale County	90	90
Lawrence County	79	76
Limestone County	82	89
Athens City	76	89
Marengo County	88	80
Demopolis City	85	80
Linden City	81	80
Morgan County	84	86
Hartselle City	84	86
Decatur City	84	86
Pike County	84	85
Troy City	91	85
Talladega County	85	87
Talladega City	85	87
Sylacauga City	84	87
Tallapoosa County	84	84
Alexander City	87	84
Wilcox County	86	83

TABLE 3

Food Establishments Inspected	Number of Inspections
Bakeries	35
Bottled Water Plants	5
Carbonated Beverage Plants	55
Caterers	10
Day Care Centers	6
Feeding Sites	38
Food Processing Plants	302
Food Service Establishments	1,371
Ice Manufacturing Plants	37
Intercounty Food Establishments	318
Itinerant Food Establishments	145
Retail Meat Markets	173
Mobile Food Vendors	118
School Lunchrooms	619
Food Storage Warehouses	8
Transport Vehicles	7
Vending Machines	3
Fish Processing Plants	55

JAIL AND PRISON PROGRAM—During 1980 seven major prisons, 17 work release facilities and one employee housing facility were inspected on a regular basis. Inspection totals were as follows:

Major Prisons	60 Inspections
All Other Facilities	88 Inspections

These institutional kitchen facilities had an 88.5 average rating.

A request was made to this office to inspect the county jails at Mobile and Calhoun counties. After the inspections were made, reports were sent to the proper authorities.

There were 244 county jails under inspection during 1980. A total of 1,535 inspections was made, giving an average of 6.29 inspections per jail for the year.

LODGING SANITATION—Valid permits in Alabama are currently held by 489 hotels. The 1,670 inspections conducted at these establishments represent 85 percent of the minimum required by the State Board of Health "Regulations Governing the Construction, Equipment, Operation, and Maintenance of Hotels." Environmentalists who have been designated assistant hotel inspectors attended training sessions held in Selma, Alabama. Improved interest and participation by county health departments may have been stimulated at these training sessions.

In 1980, 94 resident camps were operated in Alabama. These camps were inspected under applicable regulations for food and water sanitation and sewage and solid waste disposal. Efforts are underway for adoption of camp regulations, as these regulations are supported by the Alabama Camping Association.

MILK SANITATION—At the end of 1980, there were 452 producer dairies, 22 pasteurization plants, one cottage cheese plant and four single-service container manufacturing plants located in Alabama.

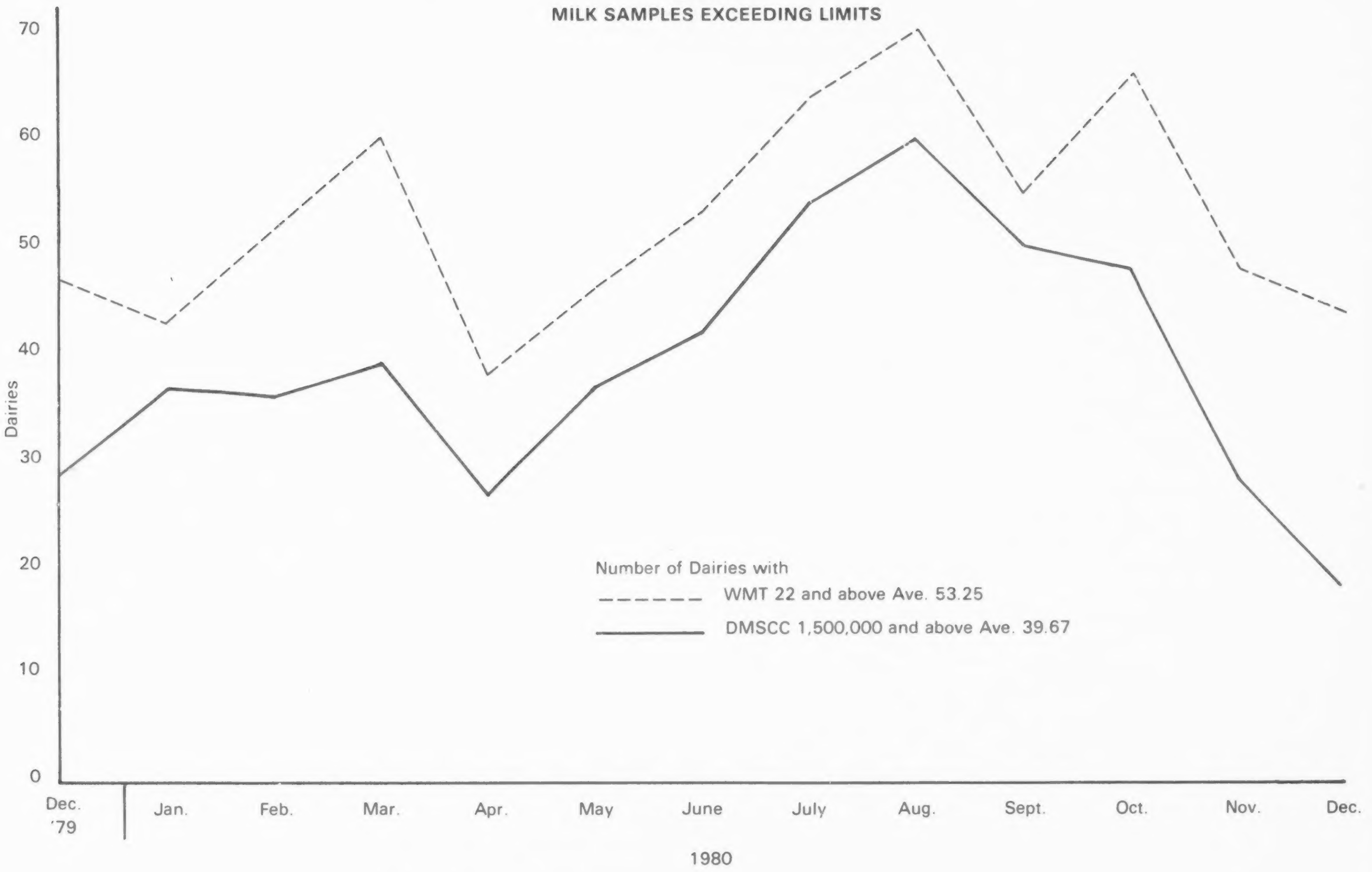
In addition raw milk from 21 sources and pasteurized milk and milk products from 50 plants outside the state were received in Alabama during 1980.

Personnel of the division made 1,099 inspections of dairy farms, 125 inspections of milk pasteurization plants, nine inspections of milk distribution stations, 20 inspections of cottage cheese plants, 16 inspections of single-service milk container plants and 20 inspections of milk tank trucks. Milk pasteurization equipment was tested 33 times. Construction plans for new or remodeled barns or for changed equipment were reviewed for 42 dairy farms.

During 1980 special emphasis was placed on improving the quality of milk by the control of mastitis. Meetings for producer dairymen were held at 12 sites throughout the state to inform them of the standards adopted by the State Board of Health. These training courses emphasized public health and economic implications associated with abnormal milk as well as methods for controlling mastitis. These meetings were attended by dairymen, industry representatives and environmentalists.

The number of milk samples that exceeded acceptable limits for Wisconsin Mastitis Test and Direct Microscopic Somatic Cell Counts is shown on Graph 1.

GRAPH 1
MILK SAMPLES EXCEEDING LIMITS



Mastitis checks, using the California Mastitis Test Kit, were conducted on 1,554 cows representing 16 herds. A total of 522 individual quarter samples from cows was collected and submitted to the State Diagnostic Laboratory for identification of organism and sensitivity.

There were 4,536 samples of raw milk collected at the farm. The limit for the Wisconsin Mastitis Test was exceeded by 689 samples. Also 487 exceeded the Direct Microscopic Somatic Cell Count; 408 exceeded standard plate count criteria; five were positive for growth inhibitors; and 10 contained added water. Established standards were violated in 795 samples.

Out of 1,477 commingled raw milk samples, 244 exceeded established standards. There were unacceptable bacteria counts in 234; two contained added water, and nine were positive for growth inhibitors.

Results of laboratory examination for 8,795 pasteurized milk and milk product samples collected show that 1,436 or 16.4 percent of these milk samples violated established standards contained in the milk regulations. Coliform standards were violated by 561; 626 violated butterfat standards; three samples were positive for phosphatase; 23 were positive for growth inhibitors; and two contained added water.

The number of pasteurized milk and milk product samples analyzed and the number of samples that exceeded established criteria are shown in Table 4.

Bulk milk hauler training was conducted for 79 milk haulers at nine locations. Three division environmentalists were certified by U.S. Food and Drug Administration as survey rating officers. A total of 54 environmentalists was certified as qualified to collect milk and milk product samples.

Two courses in pasteurized milk sanitation and frozen dessert sanitation were conducted for environmentalists at Selma. Four division environmentalists attended the Region Four Survey Officer's Seminar at Columbia, South Carolina. One environmentalist attended an industry milking equipment course at the Surge Milking Equipment Training Center in Illinois.

Nineteen surveys were completed, and the Food and Drug Administration made 10 check ratings for supplies listed on the Interstate Milk Shippers List. The milk supplies surveyed were as follows:

Milk Supply Rated	Raw	Plant	Pasteurized	Enforcement
Alabama Dairy Products, Montgomery	96	93	95	95
Baker & Sons Dairy, Birmingham	90	92	91	95
Barber Pure Milk Co., Anniston	90	90	90	91
Barber Pure Milk Co., Birmingham	91	98	95	97
Barber Pure Milk Co., Mobile	90	93	92	100
Barber Pure Milk Co., Montgomery	96	93	95	95
Black Belt Creamery, Greensboro	90	94	92	90
Cloverleaf, Selma	90	95	93	97
Dairy Fresh, Dothan	90	91	91	91
Dairy Fresh, Prichard	92	96	94	95
Flav-O-Rich, Birmingham	90	92	91	94
Flav-O-Rich, Fayette	90	94	92	95
Flav-O-Rich, Montgomery	90	92	91	97
Hall Brothers, Montgomery	92	92	92	95
Meadow Gold, Gadsden	93	91	92	90
Meadow Gold, Huntsville	95	92	93	98
Meadow Gold, Opelika	91	93	92	95
Pet, Decatur	97	92	95	95
Superbrand, Montgomery	90	90	90	97

Food and Drug Administration Check Ratings made in 1980 are as follows:

Milk Supply Rated	Producers		Plant		Enforcement	
	Published Rating	Check Rating	Published Rating	Check Rating	Published Rating	Check Rating
Alabama Dairy Products, Montgomery	96	91	93	91	95	95
AMP, Montgomery	91	91	0	0	94	92
Barber, Montgomery	96	91	93	94	95	95
Barber, Mobile	0	0	93	94	100	98
Dairy Fresh, Dothan	0	0	91	90	91	89
Dairy Fresh, Prichard	92	90	96	89	95	94
Meadow Gold, Huntsville	95	94	92	81	98	93
Meadow Gold, Opelika	91	87	93	93	95	90
Pet, Decatur	97	90	92	92	95	97
Perry's Pride, Tuscaloosa	97	98	93	89	100	99
Black Belt, Greensboro	0	0	94	91	93	93
Cloverleaf, Selma	0	0	95	90	97	96
AVERAGE SANITATION COMPLIANCE RATING	94.4	91.5	93.2	90.4	95.7	94.3

TABLE 4
NUMBER OF PASTEURIZED MILK AND MILK PRODUCT SAMPLES COLLECTED IN 1980 AND NUMBER IN VIOLATION OF ESTABLISHED STANDARDS

	No. Samples	No. High Coli.	No. High Bact.	No. BF Violation	Pos. Phos.	Pos. Growth Inhibit.	Added Water	No. in Violation	Percent in Violation
Homogenized Milk	2,096	135	158	195	1	15	0	406	19.3
Low Fat Milk	1,158	101	92			6	1	157	13.5
Skim Milk	845	75	82	191	0	2	1	282	33.3
Whipping Cream	435	6	21	26	1	0	0	48	11.0
Coffee Cream	2		0					1	0
Half & Half	549	19	39	18	0			57	10.3
Buttermilk	878	37		1				38	4.3
Sour Cream	471	13						13	2.7
Nondairy	39	1	1					2	5.1
Flavored Milk	522	55	77	196		0		251	48.0
Flavored Lowfat Milk	841	66	104		1	0		128	15.2
Yogurt	223	3						3	1.3
Cottage Cheese	514	37						37	7.1
Dressing or Dip	133	8						8	6.0
Others	39	5	3					6	15.3
TOTAL	8,745	561	577	626	3	23	2	1,436	16.4

FROZEN DESSERT SANITATION—Division and county environmentalists made 48 joint inspections of the eight frozen dessert mix processors and the nine Alabama frozen dessert manufacturing plants. In addition frozen dessert permits were issued to nine mix processors and 41 frozen dessert manufacturers which are located out of the state. There are 1,140 retail frozen dessert establishments which are now considered food-service establishments and are regulated by the food regulations adopted May 14, 1979.

A total of 16,363 frozen dessert samples was collected for bacteriological analysis with results as follows:

Retail Frozen Dessert Establishments—12,981 samples with 9,668 within bacterial standards for a 74.5 percent compliance.

Frozen Dessert Manufacturers—1,372 samples with 1,135 within bacterial standards for a 82.7 percent compliance.

Frozen Dessert Mix Processors—2,010 samples with 1,859 within bacterial standards for a 92.5 percent compliance.

A total of 220 county environmentalists and proprietors of retail establishments attended nine instructional courses on the cleaning and operation of retail frozen dessert freezers.

PLAN REVIEW—During 1980, 81 sets of plans were reviewed by the Division of Inspection. Of this total 53 were approved and 28 are pending. A majority of the plans were for school lunchrooms; however there were also plans for national guard armory kitchens and state prisons.

SCHOOL FOOD SERVICE INSPECTION PROGRAM—During the 1979-80 school year, which ran from October, 1979, to September, 1980, there were 12,638 inspections made by local and state environmentalists.

An amount totaling $234,648.50 was allocated to the individual counties as reimbursement for school lunchroom inspections. Over a 10-month period this amounted to $20 per inspection per month.

The Bureau of Health Data Systems provided this division with a monthly computer printout of all lunchroom inspections made by each county. These printouts serve as a valuable tool in implementing corrective measures.

With the exception of the summer months, the average monthly percentage for inspections was 98.5 percent. There was a total of 1,287 schools available for reimbursement during this year.

SEAFOOD PROGRAM—The State Health Officer issued five orders effecting opening or closing of oyster growing areas during 1980. Large amounts of flood water entering Mobile Bay from the Mobile River forced closure of the oyster reefs for some three months during 1980. During this time Mobile River gauges went as high as 16.4 feet on April 4, 1980. During November the State Health Officer again issued orders closing oyster reefs. This order was issued to allow the Department of Conservation to supervise and move approximately 25,000 barrels of oysters from a closed or prohibited area Dauphin Island Bay, to various areas that are classified as temporarily open. This joint operation lasted from November 3, 1980, until December 15, 1980. This operation was deemed a success by all parties concerned, including the local oystermen who later worked these reefs during the period of late December 1980 and January 1981.

Waters from various oyster growing areas were routinely sampled during the year. These samples, in conjunction with the Management Plan, were used in making determinations as to opening or closing oyster growing areas.

At year's end Alabama's conditionally approved oyster growing waters were open.

Due to the September 1979 hurricane, there was practically no oyster harvesting in Alabama during 1980 except for the "relayed" oysters from Dauphin Island Bay and some small reefs of oysters found in the northern part of Area II. These oysters were harvested during the last two months of 1980.

The oysters that were processed in Alabama during 1980 were from out-of-state sources, primarily Louisiana; however significant amounts were imported from Texas.

The number of samples collected during 1980 was somewhat smaller than in past years due to the smaller number of processing plants operating after the storm of 1979.

The relative quality of oyster samples collected during 1980 was approximately the same or perhaps a bit better than quality seen in past years. A total of 236 samples was collected. Eighty-one, or 34 percent, did not meet fecal coliform standards. All samples met plate count standards; but fifteen, or 6 percent, did not meet both standards.

Permits for oyster processing are now issued on a yearly basis instead of issuing a winter permit and a summer permit. This was done because of better refrigeration facilities and air conditioning used now in most plants.

At the beginning of the permit season, very few shops were ready to go into business, but by late November or early December some 25 plants had met minimum standards and had made application for permits.

All oyster processing plants were inspected regularly, and water supply samples were taken at each plant at the proper intervals.

New regulations for oyster processing plants have been written and reviewed, and have had public hearings held on them. Adoption of new regulations is expected early during 1981.

Twenty-one permits were issued for crab meat packing plants during 1980. Due to the 1979 hurricane, there was an unusually high number of permits. Many former oystermen converted their oyster plants to crab meat plants after the storm because the oyster reefs had been destroyed, and no work was left for local oyster catchers. Most of these shops were small or family shops, and by the end of the year many of these plants were converting back to oyster processing plants.

Sanitary inspections were made and water supply samples were taken on a regular basis.

SUMMER FEEDING PROGRAM—This program, designed to offer a nutritious lunch to underprivileged children up to 18 years of age, was in its third year of existence in 1980.

During the months of June, July and August, through a contractural agreement between the Division of Inspection and the Department of Education, preparation and distribution feeding sites were inspected by the local county environmentalists. The county health departments were reimbursed $20 per inspection each month for these sites. This money was made available through a grant to the Department of Education from the United States Department of Agriculture.

There were 1,724 inspections made in these three months with 678 made in June, 594 in July and 453 in August. At $20 per inspection this amounted to $34,480 which was reimbursed to the individual counties involved in this program.

TRAINING ACTIVITIES—Twenty-five food manager certification courses were taught by division personnel in 23 counties during 1980. A total of 786 persons attended with 599 meeting requirements for certification. The test for certification was revised during the year to reflect changes in food regulations.

The same course was taught to school lunchroom workers during the summer in the Department of Education's Child Nutrition Workshop. The total number of teaching hours was expanded but no certification test was given. Participants received a Certificate of Attendance from the Department of Education. Sixteen classes were offered throughout the state with 546 persons participating.

The 13th annual Food and Milk Sanitation Workshop was held at Troy State University in Troy, Alabama, July 21-24, 1980. Thirty-two state and county environmentalists and 12 environmental health students from Troy State University attended.

The workshop provided subject matter for new as well as experienced environmentalists employed in food and milk sanitation work throughout the state.

The frozen dessert cleaning clinics are 90-minute presentations on the proper cleaning of frozen dessert machines. Nine courses were held throughout the state with 220 persons in attendance.

The milk plant sanitation training courses were developed by the milk program manager to teach milk plant employees the importance of proper sanitation. Flav-O-Rich of Sylacauga, Barber of Oxford and Dairy Fresh of Dothan were the milk plants involved. A total of 53 plant workers completed the courses.

On October 14-16, 1980, the Alabama Dairy Conference was held in Auburn, Alabama, at the Auburn Motor Lodge and Conference Center. This even was cosponsored by the Alabama Department of Public Health, Auburn University, Alabama Dairy Products Association, Associated Milk Producers, Southern Milk Sales and Dairymen, Inc.

Topics included an update on proposed milk regulations, emergency planning, pesticides in milk, quality assurance and new testing procedures for antibiotics in milk. Over 80 persons representing both private industry and regulatory agencies attended.

Two one-day training courses in food sanitation were held by district personnel—one at Auburn University with 71 participants and one at the Bessemer Board of Education with 50 participants.

Division of Public Water Supplies

The Division of Public Water Supplies is primarily responsible for implementing the *Rules and Regulations Governing Public Water Supplies* established under the Alabama Safe Drinking Water Law. The public water supply category as defined in the law is any water system providing drinking water to 25 or more people at least 60 days per year. This category is also further broken down into noncommunity and community public water supplies. Noncommunity water supplies refer to those systems without full-time residents, and community water supplies pertain to systems providing drinking water to full-time residents. Examples of noncommunity supplies are found in parks, camps, schools and industries; some examples of community systems are those in municipalities and mobile home parks.

In 1980 there were 728 community water supplies operating in this state, including 125 in mobile home parks. Although most community water supplies used ground water, a small portion of the community supplies used surface water. All community water supplies are required to maintain a chlorine residual of no less than .5 parts per million throughout their water service area. With the exception of mobile home parks, all community water supplies are continuously chlorinated. Approximately 50 percent of community mobile home parks have chlorination equipment installed. The majority of these are located in the northern part of the state where the wells are most susceptible to contamination. In the southern part of the state, especially in Mobile and Baldwin counties, most of the wells are located in sand formations and are not subject to the same degree of bacteriological contamination as those in the northern part of the state; however since these systems are required to chlorinate, 62 mobile home parks are not in compliance.

There are 630 active noncommunity water supplies in the state although this number does fluctuate since some of the camps and parks are only open on a seasonal basis each year. Of the noncommunity water supplies, 21 percent are schools; 37 percent are campgrounds and state parks; 26 percent are restaurants and motels; and 16 percent are industries. All of the schools have chlorination equipment available to provide continuous chlorination of drinking water, but only 47 percent of the campgrounds and state parks have chlorination equipment. Such equipment is available for 23 percent of the restaurants and motels in this category, while 79 percent of the industries have chlorination equipment.

Approximately 80 noncommunity water supply systems were added during the year. Although the percentage of noncommunity systems serving industries was about the same for 1979 and 1980, the portion serving schools and restaurants and motels was reduced approximately 5 percent. This reduction occurred because community water supplies were extended into many areas formerly served by noncommunity systems. The majority of the increase in total noncommunity supplies over the 1979 figure was due primarily to a larger number of camps and parks.

Approximately 300 existing establishments with food permits used individual water sources that did not meet the requirements of a public water supply. If these establishments eventually come under the law, a significant increase in the number of public water supplies could occur. Additional staff would be needed to meet the increased work load adequately.

WATER SYSTEM CONSTRUCTION—Permits issued for construction of water projects in the state for 1980 were only slightly greater than those in 1979. The installation of almost 1,140 miles of distribution pipe in 1980 added 8,278 new customers. The total cost of projects in 1980 amounted to $49 million, while $44.7 million was spent in 1979 for the addition of 8,344 customers. Therefore the average cost per new customer in 1980 was $5,919 compared with $5,357 per customer in 1979. In 1977 the average cost per customer based on total project cost was only $2,352. The number of new customers added in 1980 was only 66 short of those added in 1979. The 1980 reduction in the number of new customers amounted to 1 percent, but a 53 percent reduction in number of new customers occurred in 1979.

Only 297 subdivisions were reviewed during the year compared with 400 in 1979, 1,000 in 1978 and 1,400 in 1977. There has been a steady decline in the number of new subdivisions due to the economy. Of the subdivisions reviewed in 1980, only 10 percent were approved for constructing individual water supplies. The remaining 90 percent will connect to existing public water supplies.

WATER DIVISION EMPLOYEES—The water division staff during 1980 consisted of six public health engineers, three environmentalists, five stenographers and two clerk typists. During the year one engineer returned from educational leave and one left on educational leave. Two engineers and one environmentalist resigned, and three engineers and one environmentalist were hired during the year. One clerk stenographer and one clerk were also hired.

There continues to be a turnover in staff. One reason for the loss of engineers is due to the major difference in salaries for the public health engineer and similar positions in the private sector. This discrepancy not only reduces the likelihood of a newly employed engineer remaining with the division, but it also reduces the potential for securing qualified graduating engineers who will accept the position as a public health engineer in the state system. Other factors such as the removal of existing positions and restrictions on hiring have influenced the current level of employment.

INSPECTION AND SURVEILLANCE—All community and noncommunity supplies in the state were visited during the year and on-site inspections were performed. During the visits to the individual water systems, contacts were made with operators, managers and water board chairmen, and a discussion of the system operation was conducted. The appropriate persons were advised of any discrepancy between the requirements of the regulations and the operation of the system. Follow-up correspondence summarizing the visit was forwarded to the person who has overall responsibility for the system. Many of the public water systems were visited more than one time during the year due to particular problems or complaints associated with the supply. The length of time used to evaluate a system during inspection visits depended on the size of the system, any problems which might have arisen with its water quality and the extent to which the water at the system is treated prior to placing it in the distribution system. For instance the time used to evaluate a system which purchases water would be much less than one using several sources with individual treatment facilities.

During the year 421 man days were used during on-site evaluations of community supplies, and 194 man days were allotted to noncommunity supplies for an average of .58 man days per community system and .31 man days per noncommunity system. The total mileage accumulated by division owned automobiles in providing these inspection visits was 101,2[illegible] miles.

There was an increase of more than 100 man days of travel time by the staff in [illegible]. Although this indicates an increase in the man [illegible] allotted to water system evaluation, more time is needed to survey thoroughly all water systems in the state so that potential health problems can be discovered and corrected.

BACTERIOLOGICAL MONITORING AND ENFORCEMENT—Under state and federal law all water systems must be monitored to determine if bacteriological contamination in excess of the established maximum contaminant level (MCL) exists in the water supply. Under the present state law, each water system is required to submit bacteriological samples on a monthly basis throughout the operational year. The number of required samples from each public water system is determined by the number of customers, but the minimum number is two samples.

To determine if a system is in compliance, the results of the monthly samples are compared with the MCL established in the *Rules and Regulations Governing Public Water Supplies*. If the system is not in compliance with the monitoring requirements or if it fails to comply with the

MCL for coliform bacteria, the water system is required to give public notification of this fact and to take corrective action. The bacteriological analyses are performed by the State Health Department laboratories.

A total of 80 community water supply systems was in violation of the bacteriological MCL during 1980. Of these, 26 were community mobile home parks to which 36 violations were issued. The other community systems were issued 68 violations on which 68 public notifications were received. In 1978, 21 percent of all community mobile home parks were in violation of the bacteriological MCL, but only 9 percent of the larger community supplies were in violation. As the difference in the number of systems in violation and the number of violations indicates, some of the systems were out of compliance more than once and were issued additional violations.

Sixty community systems were also in violation of bacteriological monitoring requirements one or more times; therefore there were 187 violations. Community mobile home parks received 40 percent of the violations, and the remaining 60 percent were issued to larger community systems.

In 1980, 101 noncommunity water systems were issued 184 violations for exceeding the bacteriological maximum contaminant level. There were also 299 violations issued to 113 noncommunity systems for bacteriological monitoring. These violations constitute respectively 18 and 21 percent of the total noncommunity systems on record during the year.

The 1980 bacteriological violations were 10 percent less than those occurring in 1979. A decrease in the number of bacteriological monitoring MCL violations of 13 percent was also noted. An overall reduction in total violations of 33 percent occurred during 1980.

There were 18 community and 17 noncommunity systems with maximum contaminant level violations during the year which were eliminated by tying into existing community water supplies. In addition 23 community systems and 39 noncommunity systems were eliminated through tie-ons with larger community systems. During 1980 a total of 97 community and noncommunity systems was eliminated by merging with larger systems.

CHEMICAL MONITORING ENFORCEMENT—All community water systems utilizing groundwater are required to conduct chemical monitoring for inorganics including heavy metals every three years. Those community water systems utilizing surface water must be analyzed for organic contaminants along with inorganics on a yearly basis. Turbidity must be monitored on a daily basis by all systems utilizing surface water. Unlike the other required chemical monitoring, turbidity does not have to be determined by an approved laboratory but is performed at the water plant by the operator or other capable personnel.

Three community water systems were issued six violations for turbidity while five noncommunity systems were issued 20. In addition five community systems were issued violations for water containing fluoride above the contaminant level. In 1980, 23 community water systems, including 13 mobile home parks, were issued 160 violations for failure to monitor for required chemical and radiological contaminants. No noncommunity MCL violations were issued for chemical or radiological contaminants during 1980.

Presently monitoring has begun for trihalomethanes in finished water from community systems having 10,000 or greater population and utilizing surface water. Trihalomethanes, or THM's, are formed when chlorine, a common disinfectant used in water treatment, combines with certain organic compounds present in the raw water source. A limit of .10 miligrams per liter has been established as the MCL for THM's.

ALABAMA WATER WELL STANDARDS BOARD—During the year 176 applications for well driller's license were processed. Of this number 150 were from Alabama, seven from Georgia, five from Florida, 11 from Mississippi and three from Tennessee. Approximately 1,500 private water supply wells were constructed during the 1980 fiscal year. During the first quarter of the fiscal year, 28 percent of the wells were constructed. The Water Well Standards Board staff inspected 506 wells. This number was 32.5 percent of the total number of wells constructed during the 12 month period. Inspections averaged about 7 water wells per county. Of those wells inspected 8.5 percent were not approved because the casings were not 12 inches above the ground, there was no sanitary seal or there was a lack of grouting. The remaining 91.5 percent of the wells constructed were in accordance with standards set by the Alabama Water Well Standards Board.

MODEL STATE INFORMATION SYSTEM—The Model State Information System (MSIS) is presently used to store general information and chemical and bacteriological records about all systems. During the year new systems were added, and systems no longer in existence were deleted. Information which was known to change such as storage, source, capacity and population was also incorporated into the public water supply file. The system is updated as changes or revisions are made in any community or noncommunity system. Although a compliance run with the MSIS program has not been accomplished so far, in the near future a computerized compliance run should be possible. A run would provide some of the information that is presently obtained manually.

TRAINING AND CERTIFICATION—The Alabama Water Pollution Control Association and the American Water Works Association are supported and actively participated in by this office. Both of these organizations contribute to the needs of the water system and help to promote interest in the industry as well as in keeping water system personnel informed of any changes in regulations or treatment techniques.

The Rural Water Association, an organization directed towards the rural water systems, has also been active in this state and is participated in by the staff of this office. Meetings are held throughout the year in different areas of the state, and members of the rural water systems are invited to attend. Speakers are obtained for these meetings from different areas in which the water system is directly involved. These meetings are primarily directed toward meeting the needs of the rural water system.

Certification of operators at all public water supply systems is the goal of the Certification Board and is required by state law. Operator training classes are conducted throughout the year with one full-time instructor as well as part-time instructors. The part-time instructors are located where operator training is most needed. The full-time instructor travels to different spots on a prearranged schedule where full-time weekly classes are held. During these classes operators are provided with information necessary to properly operate and maintain the type water system with which they are involved. Although operators are not required to attend school before being allowed to take the examination for certification, those who have attended the school have been more successful in passing the certification examination.

During March 1980 and August 1980 operator certification examinations were given. A total of 378 applicants was approved to take the examination during the two exam dates. In March 36 percent passed, and in August 42 percent passed. Of those successfully passing the examination, the majority had attended operator training classes.

Division of Radiological Health

The division regulates all sources of ionizing radiation except reactors. In addition the division maintains, in coordination with other state agencies, an emergency response capability unique for ionizing radiation.

RADIOACTIVE MATERIALS—As of December 31, 1980, the division had 391 active specific licenses to use radioactive materials. Table 1 lists the licenses by type. During 1980, 299 amendments were issued to licenses. In addition 30 new licenses were issued. One of the major manufacturers went out of business.

The division conducted inspections of 30 of these licenses in 1980. Nine incidents involving radioactive materials were reported to the division during the year.

X-RAY EQUIPMENT—Table 2 gives the total inventory of X-ray equipment in Alabama, excluding Jefferson County, which conducts its own X-ray program. Table 3 gives the X-ray inspection data for the same units. Twenty-six percent of the facilities and 9 percent of the machines were not in compliance.

ENVIRONMENTAL MONITORING AND NUCLEAR POWER—During 1980 a major commitment of division time was to revise the State Radiation Emergency Plan to meet new federal criteria. Public meetings and a two-day exercise at the Joseph Farley Nuclear Plant were held. As a result of the new criteria, major purchases of equipment will be required in 1981.

TABLE 1
RADIOACTIVE MATERIAL LICENSES

Medical	116
Academic	30
Industrial	198
Civil Defense	1
Other	46
TOTAL	391

TABLE 2
REGISTERED X-RAY MACHINES

Dental	1,414
Physicians and Clinics	673
Hospitals	721
Chiropractic	144
Veterinarians	99
Podiatrists	10
Industrial	100
TOTAL	3,166

TABLE 3
X-RAY INSPECTION MACHINES DATA

Dental	374
Physicians and Clinics	254
Hospitals	174
Chiropractic	66
Veterinarians	57
Podiatrists	6
Industrial	10
TOTAL	941

Division of Solid and Hazardous Waste

Until October 1, 1980, the Division of Solid Waste and Vector Control was responsible for solid waste management, hazardous waste management and vector control. Due to funding constraints it became necessary to transfer the vector control activities to the Division of General Sanitation for fiscal year 1981. After this transfer in October the division's name was officially changed to the Division of Solid and Hazardous Waste.

SOLID WASTE MANAGEMENT—Activities for this program area included site evaluations, site permitting, open dump inventory and complaint investigations.

A summary of the formal evaluations of landfill operations and site status is listed below:

Total sites under surveillance	134
Total evaluations made during 1980	354
Number of evaluations indicating compliance with minimum state standards	307
Number of evaluations indicating substandard operation	47

An increased activity in the open dump inventory resulted in fewer formal landfill evaluations. The evaluations were generally aimed toward the poorer operated sites.

During 1980, 40 requests for site permits were received and processed. Each site under consideration was reviewed, and the hydrogeologic characteristics were evaluated. For the 40 requests four permits were issued. Eighteen permits were denied due to poor site characteristics, and 18 operational plans are currently under design and evaluation.

Twenty landfills were evaluated for compliance with the federal open dump criteria pursuant to the Resource Conservation and Recovery Act. Six of these 20 sites were rated as open dumps and reported to the Bureau of Census for publication in the national open dump inventory. All six of the sites failing the evaluation have been placed on compliance schedules to upgrade or close.

Complaint investigations were conducted when requests were made by citizens. During 1980 the majority of the complaints involved unauthorized dumps. These investigations were conducted in cooperation with local county health departments.

HAZARDOUS WASTE MANAGEMENT—The planning and development of the Hazardous Waste Management Program made great strides during 1980. This planning and development produced the Interim Authorization Application for delegation of the federal program to the division. Other specific program activities for the year included potential site investigations, facility inspections and monitoring, and technical assistance.

On October 31, 1980, the division submitted the Interim Authorization Application to the U.S. Environmental Protection Agency (EPA) for delegation of the federal program to the division. The application included a detailed program description, a Memorandum of Agreement between the division and EPA, an Attorney General's Statement and an authorization plan. This application demonstrated that the Alabama Hazardous Waste Management Program was substantially equivalent to the federal program and therefore was entitled to authorization. Following a thorough review by EPA, it is expected that the state program will be authorized early in February 1981.

During 1980, 129 potential hazardous waste sites were investigated by field personnel assigned to the division. All of these sites were assessed for compliance with federal and state criteria. Schedules for further evaluation, attainment of compliance or facility closure have been established for each site.

Throughout 1980 over 500 inspections of generators, treatment, storage and disposal facilities and transporters of hazardous waste were conducted. The compliance sampling associated with these activities required that over 950 samples be collected and analyzed and resulted in 6,545 parameters being evaluated.

During November and December of 1980, standard procedures for inspection of facilities and monitoring of pollutants began taking shape in anticipation of program delegation by EPA. These procedures will be used to conduct interim status inspections of facilities during 1981.

Industries striving to be in compliance with both state and federal regulations requested tremendous amounts of technical assistance from the division's staff. Since the enforcement of the regulations became a reality on November 19, 1980, industries have sought assistance in the form of regulation interpretation as they relate to treatment, storage and disposal of hazardous wastes. Over one full work year of effort was afforded industries requesting such assistance.

VECTOR CONTROL—The division's vector control program was very limited in 1980. Assistance was given upon request to cities, counties and individuals on problems relating to mosquitoes, flies, rats, bats and bird roosts. Several complaints were investigated concerning fly production in caged laying houses.

Reports were received and reviewed at this office regarding mosquito populations in 28 major impoundments in the state.

As previously mentioned on October 1, 1980, the vector control section was transferred from this division to the General Sanitation Division of the Environmental Health Administration.

Alabama Air Pollution Control Commission

STATE COMMISSION ASSUMES RESPONSIBILITY FOR LOCAL AIR PROGRAM—The Mobile County local air pollution control program, one of four such programs operated in the state, was terminated February 21, 1980, by vote of the Mobile County Board of Health.

Since beginning of the permit program in January of 1972, the Mobile County local program has issued over 1,000 permits, a reflection of the intensive industrial growth in the area. Approximately 100 industries are currently permitted in the Mobile County area. Although the types of industries regulated represent a wide variety, there is a heavier concentration of chemical plants, petroleum refineries and storage facilities than in any other area of the state.

The Mobile program operated during the 1979 fiscal year with a budget of $294,859, 60 percent in federal funds and 40 percent from local appropriations. The program was funded for 12 full-time employees and four part-time.

Since the state agency is primarily responsible for implementing the Alabama Air Pollution Control Act, the AAPCC was required to assume responsibility for activities in the Mobile County area without benefit of additional funding or personnel.

AMBIENT SAMPLING NETWORK STREAMLINED—New federal requirements designed to streamline ambient air monitoring techniques and to establish a national ambient sampling network were met by the AAPCC by February of 1980.

The major goal of the regulations is to assure the quality, completeness and timeliness of air quality data collected at the state or local level.

Compliance involved reevaluating all monitoring sites in the state to establish an air quality surveillance system that consists of a network of monitoring stations designated as State and Local Air Monitoring Stations (SLAMS). Within the SLAMS network certain stations were identified as National Air Monitoring Stations (NAMS). NAMS are intended to provide data for national policy analyses/trends and for reporting to the public on air quality in major metropolitan areas. (Chart 1 gives the location of NAMS network.)

CHART 1
ALABAMA AIR POLLUTION CONTROL COMMISSION
NAMS NETWORK

			Pollutant Monitored			
City/Location	County	TSP	SO_2	NO_x	CO	O_3
Anniston/Blue Mountain Post Office	Calhoun	X				
Gadsden/Etowah Co. Health Dept.	Etowah	X				
Gadsden/Jesse Dean Smith School	Etowah	X				
Bessemer/1500 First Ave., No.	Jefferson	X				
Downtown Birmingham	Jefferson	X				
E. Birmingham/14th Ave. N. & Cahaba	Jefferson				X	
No. Birmingham/28th St., No.	Jefferson	X				
Fairfield/Police-Fire Station	Jefferson	X			X	
Mountain Brook/Area Proposed	Jefferson	X				
Pinson/Pinson High School	Jefferson					X
Tarrant City/Tarrant City Elementary	Jefferson	X				X
Florence/ECM Hospital	Lauderdale	X				
Huntsville/Madison St.	Madison	X				
Huntsville/2800 Drake	Madison	X				
Chickasaw/Younce Hardware	Mobile	X				
Mobile/Mobile Co. Health Dept.	Mobile	X				
Mobile/WKRG	Mobile		X			
Mobile/Brookley Cafeteria	Mobile	X				
Mobile/Beaureguard & Conception	Mobile	X				
Salco/Cains Service Station	Mobile					X
Theodore/Big Sniffer	Mobile					X
Montgomery/Boylston	Montgomery	X				
Montgomery/AAPCC Office	Montgomery	X				
Decatur/Fire Station No. 2	Morgan	X				

NORTH ALABAMA SITE FOR CLEAN AIR ACT STUDY—The Eastern Tennessee River Valley area, encompassing portions of Alabama and Tennessee, was one of five regions selected by the National Commission on Air Quality (NCAQ) for a national study on effective enforcement of the Clean Air Act.

Alabama counties included in the study were Colbert, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marshall and Morgan.

Results of the study will be published during 1981.

REGULATORY REVISIONS--Several hearings were scheduled during the last quarter of 1980 to receive input from the public regarding proposed changes to the state air pollution control regulations. These proposals included the following:

Volatile Organic Compounds (VOCs): VOCs contribute to the formation of ozone, a pollutant which can cause eye and lung irritation and has an offensive odor. They damage vegetation and are responsible for the smog found in many highly urbanized areas. In April of 1979 the AAPCC adopted regulations for the control of VOCs from 11 major source categories, based on the development of technical documents specifying the feasibility of VOC controls for these sources. Since that time technical guidance for air pollution control strategies for nine additional sources of VOCs has been completed. The industries to be affected by the new proposals include any of the following with the potential to emit 100 tons or more a year of VOCs: leaks from petroleum refinery equipment, surface coating of miscellaneous metal parts and products, surface coating of flatwood paneling, manufacture of pneumatic rubber tires, graphic art systems (rotogravure and flexography processes), external floating roof petroleum liquid storage, perchloroethylene dry cleaning systems, leaks from gasoline tank trunks and vapor collection systems and manufacture of synthesized pharmaceutical products.

Prevention of Significant Deterioration (PSD): The protection of air quality in areas where ambient levels are better than the National Ambient Air Quality Standards was a major concept addressed in the 1977 Clean Air Act Amendments. The act mandated that plans be implemented by state air pollution control programs which would assure that industrial growth and development were compatible with the preservation of existing air quality in these clean air areas. Basically the PSD regulations proposed by the AAPCC establish requirements for issuing permits to construct to new facilities planning to locate in areas subject to PSD requirements—which in Alabama as in most states includes a major portion of the land area.

The AAPCC has since May of 1980 been one of 11 states in the nation to have received authority from EPA to administer the federal PSD regulations. The adoption of state PSD regulations is expected to further facilitate the new source review process by allowing industrial sources to receive authority from the state to construct without having to undergo the time-consuming federal review process.

NONATTAINMENT DESIGNATIONS—Two portions of Jefferson County (metropolitan Birmingham and the City of Leeds) were among those defined as nonattainment for the primary (health-related) standard for total suspended particulates (TSP) when the original designations were made in December of 1977.

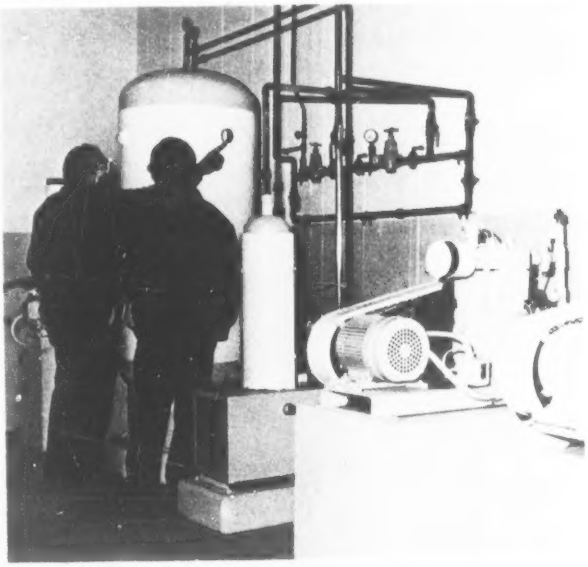
Ambient samples collected since that time however indicate that approximately 50 percent of the area currently classified as primary nonattainment for TSP should be reclassified as either attainment, nonattainment for the secondary TSP standard or unclassified. (Jefferson County TSP Nonattainment Designations are indicated on the map included.)

Another nonattainment area of the state proposed for redesignation during the year included that portion of Morgan County in the vicinity of the City of Decatur which was originally proposed as nonattainment due to violations of the secondary (welfare-related) standard for TSP. The proposed redesignation to attainment status was based on ambient data which indicated no violations of the standards.

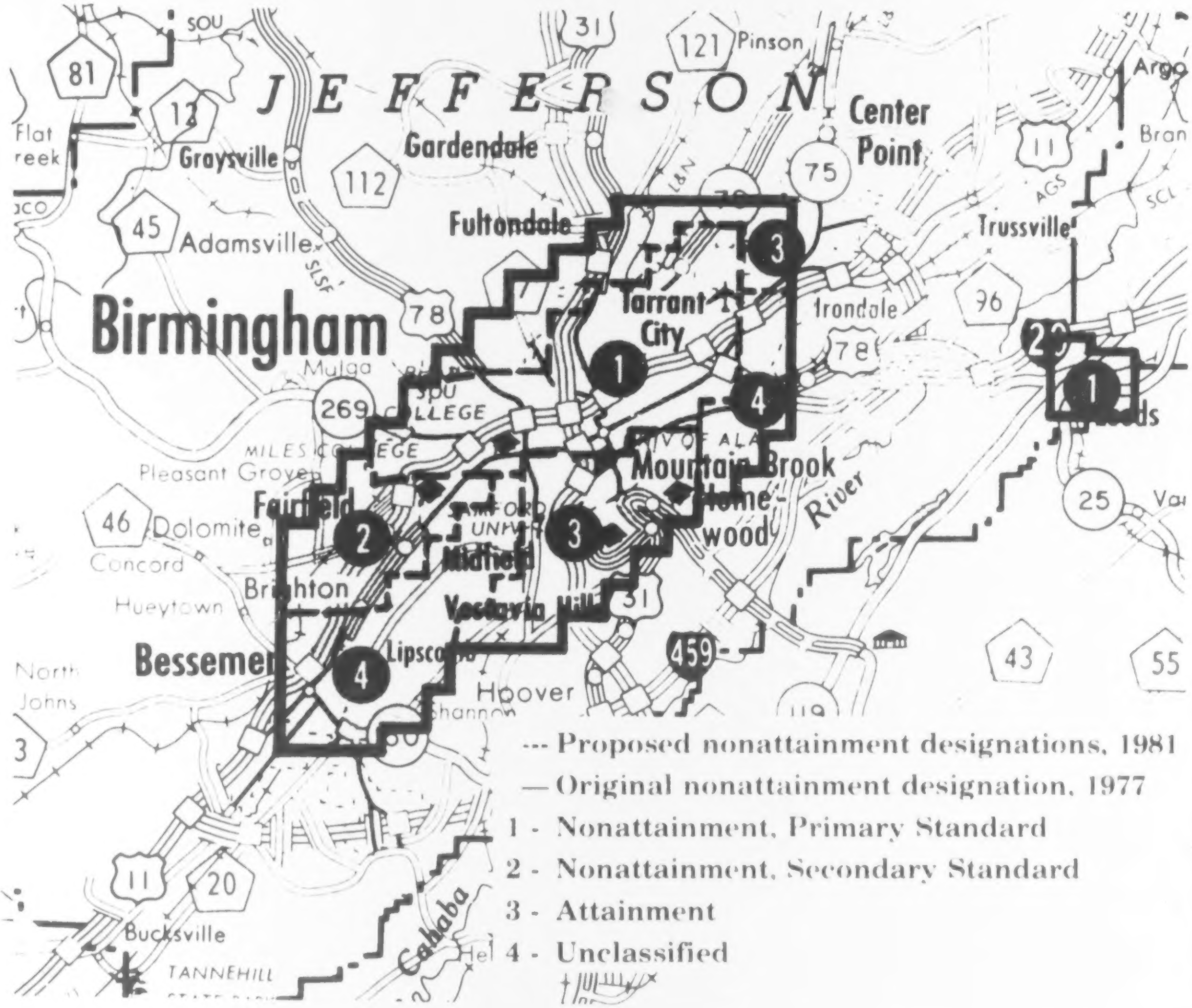
The Environmental Protection Agency is expected to review and approve these redesignations during 1981.

With the exception of the five counties (Jefferson, Mobile, Morgan, Madison, Russell County—Columbus, Georgia, interstate air quality control region), all counties in the state were designated unclassified for ozone, due to the lack of monitoring data.

In an attempt to classify as much of the state as possible with respect to ozone, in the spring of 1980 the AAPCC established four monitoring sites for this pollutant. Monitors were located 10 to 15 kilometers downwind of major metropolitan areas in Tuscaloosa County, Prattville and Attalla. A background site is located in Monroeville.



JEFFERSON COUNTY TSP NONATTAINMENT DESIGNATIONS


JEFFERSON
Birmingham
Graysville
Gardendale
Pinson
Center Point
Fultondale
Adamsville
Tarrant City
Irondale
Trussville
Argo
Mulga
Pleasant Grove
Fairfield
Dolomite
Concord
Hueytown
Brighton
Bessemer
North Johns
Midfield
Vestavia Hills
Mountain Brook
Homewood
Lipscomb
Hoover
Bucksville
TANNEHILL
Cahaba
River
MILES COLLEGE
SAMFORD UNIV
UNIV OF ALA
Flat Creek
1
2
3
4
81
13
112
31
121
75
45
78
269
46
96
11
25
43
55
459
20

--- Proposed nonattainment designations, 1981

— Original nonattainment designation, 1977

1 - Nonattainment, Primary Standard

2 - Nonattainment, Secondary Standard

3 - Attainment

4 - Unclassified

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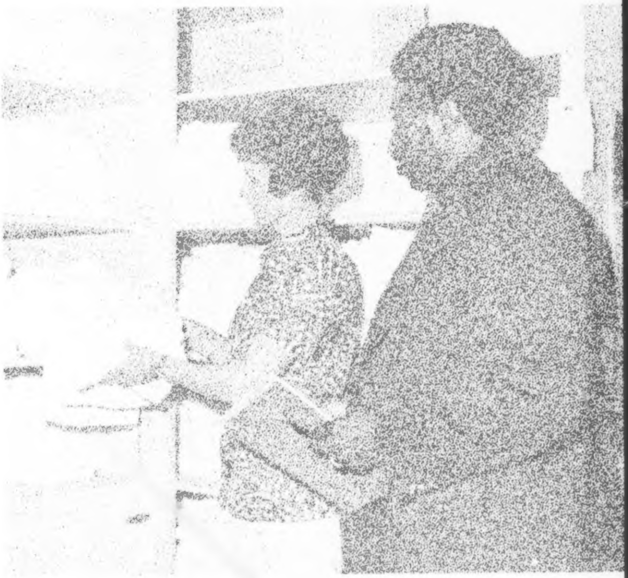
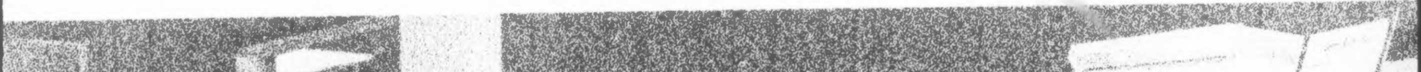
BUREAU OF LICENSURE AND CERTIFICATION





During 1980 this agency experienced no major changes in organization, funding, activities, duties or responsibilities. Considerable efforts were expended in the development of regulations for several new categories of health care facilities established by legislation passed during the 1979 session. Included are end stage renal disease treatment and transplant centers, abortion or reproductive health centers, ambulatory surgical treatment facilities, rehabilitation centers and health maintenance organizations. Respective regulations were adopted by the State Board of Health in December and become effective in January, 1981.

Certification activities continued essentially unchanged except for increasingly strong emphasis on upgrading quality of care in long-term care facilities with corresponding monitoring of the agency by federal staff responsible for Medicare/Medicaid certification.

An agreement to furnish architectural and engineering review services was executed with the State Health Planning and Development Agency. Preliminary activities began on the formulation of Memoranda of Understanding with the Commission on Aging and the Professional Standards Review Organization, known as Alabama Medical Review, Inc.

Division of Certification

Determining eligibility of health facilities and agencies and recommending certification to the appropriate government agencies to participate in the Medicare and Medicaid programs are the responsibilities of the Bureau of Licensure and Certification. The Medicare certification program is conducted in accordance with an agreement with the Secretary of the Department of Health and Human Services, and the Medicaid certification program operates under a similar agreement with the Commissioner of the Medical Services Administration. Both the Medicare and Medicaid certification programs are administered at the state level by the Certification Division.

During 1980 the certification activity of Medicare and Medicaid health care providers and suppliers remained fairly constant compared to 1979. Virtually all skilled nursing homes in the state now provide intermediate care as well as skilled care.

Generally health facilities and agencies participating in one program also participate in the other. There are some exceptions; for example freestanding intermediate care facilities can participate in Medicaid only. Each facility is surveyed at least annually to determine eligibility for recertification. In addition to the annual survey, bureau personnel—nurses, pharmacists, dietitians—visit facilities and agencies periodically to follow up on identified deficiencies and to provide assistance in complying with Medicare/Medicaid regulations.

Following is the number of facilities and agencies participating in the Medicare and/or Medicaid programs as of December 31, 1980.

	Medicare	Medicaid
Hospitals	136	133
Skilled Nursing Facilities	185	187
Skilled Nursing Homes with ICF Certification		184
Intermediate Care Facilities (ICF)		20
Intermediate Care Facilities for the Mentally Retarded (ICF/MR)		3
Home Health Agencies	92	80
Independent Laboratories	45	20
Rural Health Clinics	17	14
Renal Dialysis Facilities	19	12
Rehabilitation Centers	7	

Compliance Division

During 1980 a total of 390 visits was made to facilities to conduct annual reviews and investigate complaints. Additional visits were made to facilities to provide consultation, conduct orientation sessions and assist new facilities or, in instances of change of ownership, to meet the basic requirements of Title VI for certification as provider of services in Medicare/Medicaid.

The Compliance Division coordinated efforts with the Office of Civil Rights in conducting an increasing number of investigations of complaints alleging discrimination because of handicap, sex or age. However "no fault" findings were made on all complaints filed against health facilities. The new emphasis of the Office for Civil Rights for the year was black representation on governing bodies, boards, councils and planning agencies. Additionally the Office for Civil Rights conducted a number of reviews in Alabama during the year. Part of the reviews was for compliance with Section 504 of the Rehabilitation Act of 1973 and the Community Services Act of 1979.

Region IV OCR statistics for 1980 show that the time frame for Title VI certification of Alabama's health facilities is significantly less than in other states in the region. This is due in part to the continuing improvement in minority utilization and participation in Alabama's health programs and services as indicated in the following statistics:

Nursing Homes	1968	1970	1972	1974	1976	1978	1980
Multi-racial	33.8	52.0	70.6	85.0	93.0	96.3	97
White Only	59.1	43.5	24.4	14.0	6.5	3.1	3
Nonwhite Only	7.1	4.5	6.0	1.0	.5	.6	0

A new Memorandum of Understanding between the Compliance Division and the state Women, Infants and Children Program (WIC) agency places responsibility with the Compliance Division for developing and implementing policies and procedures for the WIC agency compliance program including Title VI, Section 504, Age Discrimination Act of 1975. The division has the further responsibility for investigating and resolving all civil rights complaints. The director of the Compliance Division assisted in developing the civil rights portion of the WIC Agency State Plan (Methods of Administration) including an affirmative action plan and grievance procedure for employees.

As with other federal agencies, the Compliance Division continues to work with the F.N.S. Division of the U.S. Department of Agriculture in coordinating compliance efforts to maintain a uniform approach and to implement civil right regulations in all programs administered by the Alabama Department of Public Health.

During the coming year increased activity in the area of Section 504 reviews, implementation of the Age Discrimination Act of 1975 regulations and an increase in the number of complaints alleging discrimination based on age, sex and handicap are expected.

Division of Field Services

Selected teams of professional personnel assigned to this division continued to visit hospitals, skilled nursing homes, intermediate care facilities, domiciliary homes, home health agencies, independent medical laboratories, cerebral palsy treatment centers, providers of outpatient physical therapy and speech pathology services, end stage renal disease dialysis facilities and rural health clinics.

The policy of unannounced surveys for all providers was changed effective July 1, 1980. In accordance with current requirements, 10 percent of long-term care facilities are selected through a computer random selection for unannounced surveys. All other surveys are announced.

A summary of activities by the Field Services Division during 1980 are as follows:

FIELD SERVICE ACTIVITIES
1980

Facility Classification	Licensure Inspection	Certification Surveys	Post-Cert. Visits	Consultation Visits	Complaints Special Inv.
Hospitals	29	150	34	36	34
Nursing Homes	240	222	203	152	139
Cerebral Palsy Treatment Centers	2	0			
Domiciliary Care Facilities	11				
Health Maintenance Organizations					
Independent Clinical Laboratories	66	46	23	15	3
Maternity Homes	2		0		
Rehabilitation Centers	0	7	5	1	0
End Stage Renal Dialysis Facility	0	19	11	5	
Home Health Agencies	0	86	17	5	5
Independent Physical Therapists	0	6	0		
Mental Health Centers	0	0	0		
Rural Health Clinics	0	20	10	6	1
Intermediate Care Facility/ Mentally Retarded	0	3	4	6	0
Unlicensed Nursing Facility (Boarding Home)					7

Hearing Aid Licensing Division

Since October 1971 hearing aid dealers and fitters have been required to be licensed. Persons who select, fit and sell hearing aids must demonstrate that they are qualified before they can be licensed. Licensure examinations are held annually in January and July. A five year summary of hearing aid licensing activity follows:

Calendar Year	Regular License Renewals	Temporary Permits Issued	Passed Examination	Failed Examination
1976	110	62	18	2
1977	112	24	10	3
1978	106	40	12	1
1979	103	28	12	4
1980	98	27	15	4

The hearing aid dealers licensure law provides for the establishment of a Board of Hearing Aid Dealers. During 1980 the Governor made appointments to fill the two vacancies on the board.

To strengthen the authorization for promulgating rules and regulations, the board has drawn up a bill which it will seek to have introduced in the 1981 legislature. If the bill passes, it will repeal Section 34-14-1 through Section 34-14-33, *Code of Alabama, 1975*.

This proposed legislation requires that each dealer present evidence of having a properly calibrated audiometer or other instrument approved by the board. Also dealers are required to participate in 16 hours of approved continuing education over a period of two years. The board has planned to conduct several educational programs in 1981 which will benefit all state licensees.

Licensure Division

All health care facilities subject to licensure were inspected as scheduled by the requirements of the licensure program. Staff recommendations based on the results of the visits were submitted to the Licensure Advisory Board for types of licenses to be issued. After considering the recommendations, the Licensure Advisory Board forwarded its findings to the State Committee of Public Health for approval. With the exception of one facility which did not return its application and fee, all licenses were issued promptly for 1980.

Staff recommendations to continue two research projects were made. With the concurrence of the Licensure Advisory Board and the State Committee of Public Health, the projects were approved for a second year.

The Hospice Research Project is being conducted in detail, using the *Rules, Regulations and Standards for Nursing Homes* as the basic requirements. The project originally began with a concerned 137-bed skilled nursing home requesting 10 hospice inpatients and 24 outpatients. In September the number of inpatients was increased to 20 with no increase in the number of outpatients. The preliminary reports show that the current nursing home requirements will be sufficient if additional services are required. The additional services will be detailed and specific and will be in the form of written requirements.

The Rehabilitation Research Project is being conducted to observe the effects of having three rehabilitation patients in a bedroom. The requirements currently limit the bedrooms from having more than two patients. This project has gone very smoothly, and preliminary reports indicate that three people in a room progress faster and need less assistance.

The regular session of the 1980 legislature passed Act 80-642 which increased the licensing fee for facilities. The intent of the act was to get the licensure program closer to being self-supporting. Also Act 80-642 included the provisions for hospitals accredited by the Joint Commission on the Accreditation of Hospitals to be exempt from licensure inspections.

Rules, regulations and standards for health maintenance organizations, ambulatory surgical centers, end stage renal disease centers, abortion clinics and rehabilitation centers were adopted on December 2, 1980, with the effective date being 30 days after adoption. The requirements for licensure of these facilities are consistent with the State Health Plan.

During 1980 two nursing homes lost their certification for Medicaid and were forced to discharge all their patients. Subsequently the facilities were requested to surrender their licenses as they were not functioning as nursing homes. The facilities did as requested and remain closed.

Licenses were initially issued for 211 nursing homes, 137 hospitals and 69 independent clinical laboratories. Also three independent clinical laboratories, three hospitals and three nursing homes voluntarily discontinued operations. Overall the licensure program experienced a net gain of three facilities, 128 hospital beds, 272 nursing home beds and 80 domiciliary beds. There were nine changes of operational control of licensed facilities in 1980. The following chart provides a comparison at the beginning and the end of the year for those facilities licensed by the State Board of Health.

LICENSED HEALTH CARE FACILITIES

Type of Facilities	Number of Facilities		Number of Beds		Gains/Losses	
	1/1/80	12/31/80	1/1/80	12/31/80	Facilities	Beds
Hospitals	137	136	20,264	20,392	-1	+128
General	130	128	19,480	19,533	-2	+53
Special*	7	8	784	859	+1	+75
Nursing Homes	211	212	20,576	20,848	+1	+272
Skilled Nursing Home	52	46	4,343	3,782	-6	-561
Nursing Home (Unskilled)	22	21	1,235	1,125	-1	-110
SNH/NH	137	145	14,998	15,941	+8	+943
Materity Homes	2	2	70	70	0	0
Mental Health Centers	1	0	24	0	-1	-24
Cerebral Palsy Treatment Centers	2	2	99	99	0	0
Domiciliaries	10	11	584	664	+1	+80
Health Maintenance Organizations	0	0	0	0	0	0
Independent Clinical Laboratories	69	72	N/A	N/A	+3	N/A
TOTAL	432	435	41,617	42,073	+3	+456

*Types of hospitals designated as "special" are chronic disease, mental, pediatrics, eye and rehabilitation.

Plans and Construction Division

To ensure safe, functional and efficient health facilities, the Plans and Construction Division, with expertise in architecture, engineering and construction, reviews plans and inspects buildings.

The division enforces the building regulations which the State Board of Health has established as a part of the licensing requirements for hospitals, nursing homes, ESRDs, rehabilitation centers, HMOs, abortion clinics, ambulatory surgical treatment facilities and domiciliaries. These standards prescribe necessary functional elements; establish minimum requirement for patient environment; and require that specified building, fire and safety codes are met.

Federally aided health projects, including those given grants and loan guarantees, are also reviewed and inspected by this office. The federal agencies include the Department of Health and Human Services, the Department of Housing and Urban Development, the Appalachian Regional Commission and the Farmers Home Administration.

Project activity in 1980 was as follows:

	Private Financing	Federally Aided
Projects Reviewed	110 (2,534 beds)	10 (no beds)
Projects Under Construction	54 (1,699 beds)	7 (no beds)
Projects Completed	43 (1,054 beds)	0 (no beds)

A condition for participation in Medicare and Medicaid is that hospitals and nursing homes maintain their buildings in compliance with the Life Safety Code of the National Fire Protection Association. The division makes annual inspections, reviews plans, consults and performs necessary follow-up work to enforce this program at all hospitals (except those accredited by the Joint Commission) and nursing homes participating in Medicare-Medicaid. Employees performing these tasks act in their role of deputy inspector or building construction engineer. During 1980, 252 Life Safety Code inspections and 245 follow-up visits were made to 29 hospitals, 191 skilled nursing homes, 21 intermediate care facilities and three ICF/MRs. Staff training, fire drills, evacuation plans, fire control procedures, disaster plans and smoking regulations are incorporated in the fire safety consultation and education.

Architectural and engineering services are extended to the State Health Planning and Development Agency (SHPDA). These services include but are not limited to the following:

1. Review schematic plans submitted with certificate of need applications.
2. Review plans for federally funded projects which are not licensed by the Bureau of Licensure and Certification and make inspections during construction.
3. Make inspections of facilities to evaluate size of each department or adequacy of facility.
4. Make on-site visits to determine bed capacity.
5. Review contracts for all facilities.

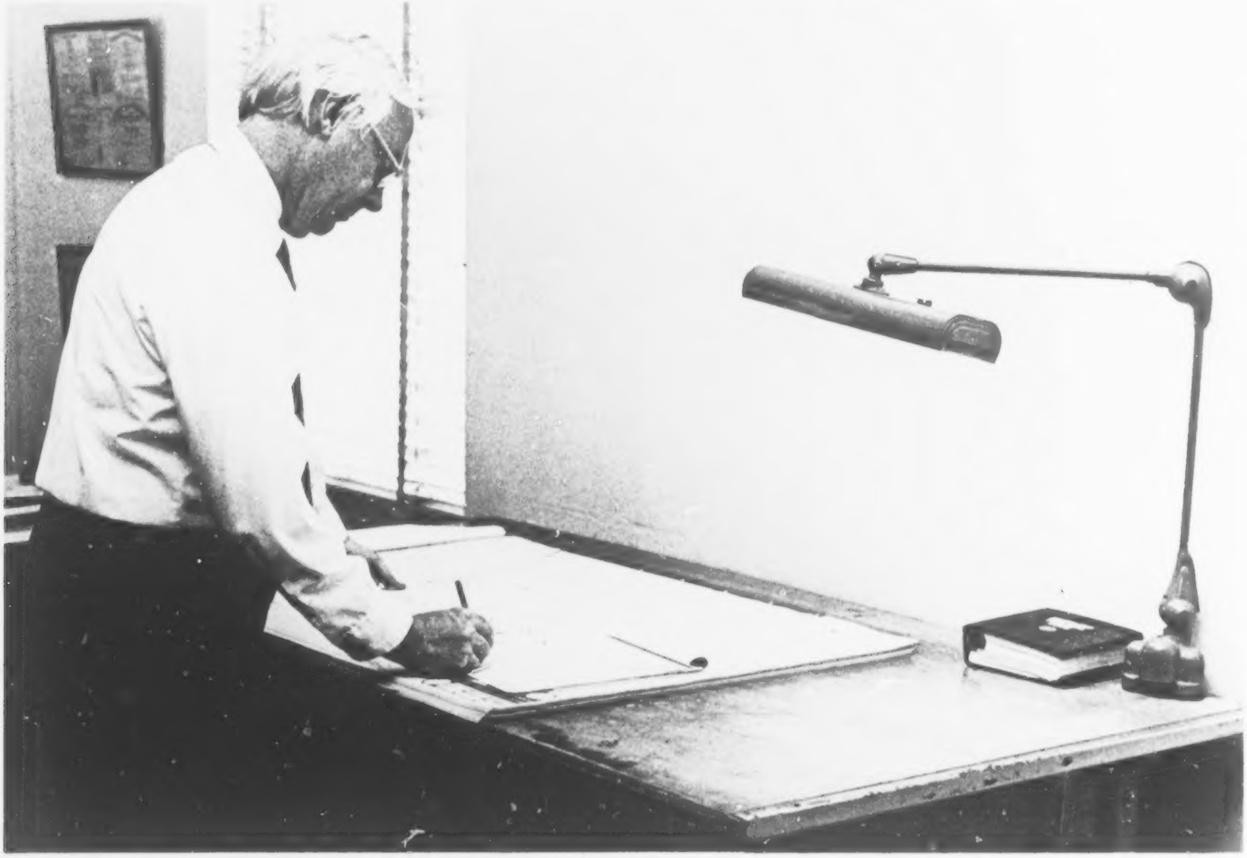
The health care industry has become so complex with continual innovations in equipment and services that buildings must be more flexible and expandable. Long-range planning is already saving millions of dollars both in construction and increased efficiency of personnel. The division works with every facility involved in construction to ensure that buildings are as functional as possible and will respond to the needs of the future.

Division of Quality Control and Training

During 1980 a revised format for training newly employed surveyor personnel was implemented. The new format centers around a new training manual with continued use of audiovisual aids from the program used in the past. Major emphasis of the new program has been on making it more formalized and requiring documented evaluations of each section.

To date two surveyors have accomplished the training program with what appears to be good results. Presently three surveyors are participating in the training program and are scheduled to complete the last portion, the basic surveyor training program, in February 1981.

In November a series of one-day Home Health Agency Workshops were conducted in Decatur, Tuscaloosa, Jacksonville, Montgomery, Dothan and Bay Minette. Home health agencies must meet criteria as set forth in federal regulations in order to receive payment under Title XVIII and XIX of the Social Security Act. The objectives of the workshops were to provide better understanding of the regulations and to provide an opportunity for discussion of problems being encountered. These workshops were well attended, and evaluations by attendees indicated good interest. Other workshops are being planned; one of these will be on end stage renal dialysis.



Frederick S. Wolf, M.D.

PERSONAL HEALTH SERVICES ADMINISTRATION

TALLADEGA COUNTY
HEALTH CENTER

Personal Health Services Administration unifies the diverse programs and activities of the Division of Epidemiology; the Special Supplemental Food Program for Women, Infants and Children; the Bureau of Clinical Services; the Bureau of Local Health Services; the Bureau of Maternal and Child Health/Family Planning; and the Bureau of Public Health Nursing. The purpose of this administration is to maintain coordination between the divisions, bureaus and programs from the top echelon of management to the individual employee delivering services to Alabamians. The administration establishes the operating policies and procedures, administers and evaluates the effectiveness and efficiency of the various programs, checks on the quality of services rendered and supervises methods of operation.

Budget justification and objective-setting discussions were held with all programs. Objectives are continually monitored and updated in order to measure the efficiency and effectiveness of the programs better.

In addition to management and supervision, the administration provides professional and technical assistance and serves as liaison with various other Health Department units and outside agencies which have a bearing on the operation of this administration.

Division of Epidemiology

The Division of Epidemiology has traditionally had the role of investigating outbreaks or endemics of disease and implementing control measures. In recent years the Division of Epidemiology has expanded its services to include such diverse services as program evaluation, chronic disease consultative services in such diseases as cancer and hypertension, and investigation of environmental and occupational diseases.

Over the past year there has been a marked increase in the demand for epidemiologic services. During 1980 the Division of Epidemiology responded to 369 requests for assistance and/or consultation, more than double the number of requests received in 1979. Of these, 322 represented investigations and control measures for acute infectious disease outbreaks, 31 represented investigation and elimination of environmental and occupational hazards and/or diseases caused by environmental contamination, and 16 represented consultation on program evaluation, chronic diseases or instructional services. In spite of this marked increase in services demanded of the Division of Epidemiology, it continues to suffer from a lack of personnel.

During 1980 the Division of Epidemiology continued to publish the *Communicable Disease Report*. This report is disseminated to health care providers and other interested parties to provide information on diseases which are currently threatening the Alabama population. The *Communicable Disease Report* is published monthly and provides feature and short articles on currently prevalent diseases and disease trends.

The Division of Epidemiology has also continued to develop policy guidelines to be used in county health departments. These guidelines are intended to provide protocols for investigation of cases of specific diseases and initiation of control measures. These enable the county health departments to proceed on routine disease control matters in a more expeditious manner and to provide uniform disease control measures throughout the state.

Semiannual meetings with epidemiology liaison personnel from county health departments were continued during 1980. These meetings present an opportunity for group discussion among those involved in disease control matters throughout the state. Additional training and continuing education by the Division of Epidemiology is provided in conjunction with these meetings for the liaison personnel.

The Division of Epidemiology is continuing its efforts for passage of proposed legislation which will enable an alteration and modernization of the list of reportable diseases. Unfortunately this bill did not pass the legislature during 1980. With passage of this legislation, the list of reportable diseases can be reduced from over 50 to fewer than 30 commonly reportable diseases. More importantly the new list of reportable diseases will be limited to those diseases on which public health action is required. The old list contained many diseases which did not require public health action and used some 19th century terminology which no longer applies to disease entities of today. This led to confusion and failure to report on the part of physicians.

Food and waterborne illness comprised the largest category of requests for assistance. The division investigated or provided assistance with the investigation of 83 outbreaks of food or waterborne illness or other illnesses transmitted by the ingestion of contaminated substances. Of these, 12 involved institutions, including two in hospitals or nursing homes, four schools and six day care centers. Of particular interest is the investigation of several outbreaks involving disease associated with the consumption of oysters.

The second largest single group consisted of requests for assistance in the evaluation and control of central nervous system diseases, including meningitis and encephalitis. The Division of Epidemiology investigated or provided assistance in investigating 63 cases or outbreaks of central nervous system diseases. Control measures, including the provision of prophylactic antibiotics for contacts, were directed by the Division of Epidemiology.

The third largest group of requests (47) was for assistance in the evaluation of cases or outbreaks of hepatitis. Several hundred people received immune serum globulin prophylaxis as a result. Three inquiries were received from hospitals regarding the control of hepatitis B in hospitals and hemodialysis units. During 1980 the Division of Epidemiology encountered increasing problems with spread of hepatitis A in day care centers and in jails, prisons and other detention facilities. Three outbreaks were investigated which involved spread of hepatitis among day care center employees, children and their parents. Investigations of three additional outbreaks involved schools or universities within the state. Six investigations involved the spread of hepatitis within jails, prisons or other detention facilities.

During 1980 the Division of Epidemiology increased its commitment to provide consultation on hospital infection control or related problems. The division is attempting to develop a relationship with hospital infection control nurses throughout the state and with the Alabama Chapter of the Association of Practitioners of Infection Control. This relationship will help provide the necessary resources to hospitals to assist them in controlling the spread of infection within their institutions. In return this division hopes to establish the system of hospital-based reporting of many of the reportable diseases, thereby giving a view of what diseases are prevalent throughout the state. In October of 1980, as a joint effort of the Division of Epidemiology, the Alabama Chapter of the Association of Practitioners of Infection Control and the Alabama Hospital Association, the division directed a three-day course in hospital infection control for new infection control nurses throughout the state.

The Division of Epidemiology participated with the Centers of Disease Control in investigating the health effects of DDT and PCB contamination of Huntsville Spring Branch and Indian Creek in Madison County. An epidemiologic study was carried out to evaluate the health effects on residents of Triana who have for a long period of time eaten fish from these two contaminated waterways.

Histoplasmosis continued to be a problem. During 1980 the Division of Epidemiology provided consultation on seven requests for assistance in dealing with this problem. In addition the Division of Epidemiology provided consultation on an investigation of possible nosocomial Legionnaires' disease. The investigation revealed however that the outbreak did not represent hospital acquisition of the disease.

During 1980 the Division of Epidemiology provided backup support for the Rabies Control Program of the Bureau of Local Health Services. During this time the Division of Epidemiology responded to 25 requests for assistance with rabies vaccine or animal-bite-related problems.

An enlarging and continuing problem encountered by the Division of Epidemiology is the spread of disease in day care centers and nursery schools. The division investigated nine outbreaks of disease in day care centers, including the three outbreaks of hepatitis previously mentioned, three outbreaks of shigellosis, one salmonellosis, one measles and one meningococcal meningitis.

In its work the Division of Epidemiology must coordinate its activities with all other units of the State Health Department and with other state, local and federal agencies. Particularly close cooperation is necessary with the Environmental Health Administration of the State Health Department. In cases of environmental contamination, the Environmental Health Administration provides consultation on the engineering and technical aspects of handling the contamination while the Division of Epidemiology provides information on the medical toxicologic and epidemiologic effects of these problems. A close working relationship has developed between the Environmental Health Administration and the Division of Epidemiology, enabling the development of expertise in this area.

The Division of Epidemiology depends on the valuable services and continued support of the Clinical Laboratory Administration and the local health departments for achieving its program goals.

1980
SEASONAL OCCURRENCE OF DISEASES

DISEASES	January	February	March	April	May	June	July	August	September	October	November	December
Tuberculosis	43	65	52	64	52	61	55	53	52	64	52	50
Syphilis	ﾛ4	72	82	81	51	84	72	77	108	91	62	59
Gonorrhea	1,226	2,560	1,396	2,419	1,785	2,301	1,581	2,584	2,478	2,273	2,347	1,514
Chancroid												
Amebic dysentery			1		1			1		1		3
Chickenpox	8	99	172	83	143	166	12	2	8	10	60	29
Diphtheria												
Encephalitis				1		2	1	5	1	1	1	
German measles		1	1	1								
Hepatitis, infectious	26	32	34	19	26	15	17	20	13	7	20	8
Hepatitis, serum	15	18	19	11	26	24	29	22	16	8	57	28
Hepatitis, unspec.	3	10	8	14	10	13	17	13	8	9	16	17
Influenza	4	4	33	93	48	19	11	7	12	23	41	55
Malaria			2		2	2					2	
Measles	6	6	3	1	1	5						
Meningitis, aseptic	4	11	6	5	7	35	44	148	115	76	17	69
Meningococcal men.	9	4	10	8	1	5	5	4	4	2	3	3
Mumps	1	3	4	2	1	2	1	4	3	4	5	6
Pellagra												
Pneumonia	449	647	727	500	510	337	342	381	345	287	443	381
Poliomyelitis												
Rheumatic fever		1	4	1	2		4					1
Rheumatic heart	7	5	3	9	8	4	7	6	9	8		7
Rocky Mt.spotted fev.					3	3		4	6	1		1
Salmonella	19	41	25	26	35	51	47	67	75	58	52	38
Scarlet fever*	60	156	174	163	175	146	121	107	138	90	192	208
Shigella	8	13	18	6	24	15	11	22	9	11	17	3
Smallpox												
Tetanus					1						1	2
Tularemia									1	1		
Typhoid fever			1				1	1		1		
Typhus fever												
Undulant fever		1	2					2		1		
Whooping cough				1			2					

*Includes strep throat

1980
CASES OF COMMUNICABLE DISEASES

DISEASES	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Tuberculosis	1,166	985	918	790	785	780	824	704	672	644	663
Syphilis	391	445	405	442	519	542	432	350	421	577	893
Gonorrhea	8,470	10,852	15,934	19,704	21,673	24,418	25,026	24,936	25,082	26,012	24,464
Chancroid	4	2	6	2	2		1				
Amebic dysentery	5	1	3	2	4	1	4	1	5	2	7
Chickenpox	776	538	535	904	570	1,018	659	1,060	915	525	792
Diphtheria	20	17	7	6							
Encephalitis	7	10	28	19	9	78	87	12	16	28	12
German measles	396	233	63	210	66	23	2	110	25	44	3
Hepatitis, infectious	431	384	382	478	323	304	218	212	224	267	237
Hepatitis, serum	16	39	101	195	186	259	221	175	168	236	273
Hepatitis, unspecified					42	43	35	74	57	120	138
Influenza	37,280	1.125	23,697	2,013	5,419	6,309	1,471	3,123	3,809	3,703	350
Malaria	27	23	18	5		6	2	6	2	6	8
Measles	430	2,035	161	14	21	5		79	102	129	22
Meningitis, aseptic	146	118	86	139	59	159	136	183	148	289	537
Meningococcal meningitis	27	36	20	19	13	32	40	61	52	41	58
Mumps	410	1,044	860	758	618	454	368	400	437	28	36
Pellagra			1								
Pneumonia	4,277	3,687	3,806	3,760	4,163	4,012	3,879	3,904	4,564	4,988	5,349
Poliomyelitis					1						
Rheumatic fever	119	89	85	256	70	710	76	407	11	11	13
Rheumatic heart	211	286	186	768	172	279	150	134	138	79	73
Rocky Mt.spotted fever	12	9	20	28	14	10	15	20	13	21	18
Salmonella	344	275	346	404	328	329	382	425	486	474	534
Scarlet fever*	5,389	5,201	6,313	4,686	6,244	6,033	6,230	3,888	4,702	3,535	1,730
Shigella	110	115	98	121	130	208	114	125	246	121	157
Smallpox											
Tetanus	6	4	3	4	1	1	2	3		5	4
Tularemia	1	3	1		2			1	1		2
Typhoid fever	8	8	11	14	4	3	1	1	3	8	4
Typhus fever									1		
Undulant fever		2	2		1	3	3	2	3	3	6
Whooping cough	26	85	30	15	20	46	6	4	3	4	3

*Includes strep. throat.

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	AMEBIC DYSENTERY			JUVENILE ONSET DIABETES			HISTOPLASMOSIS			LEGIONNAIRES' DISEASE		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	5	1	7	188	82	320	3		21	6	4	10
Autauga				1		2			2			
Baldwin				2		2						
Barbour												
Bibb				1		1						
Blount				2		2						
Bullock					1	1						
Butler				2		2						
Calhoun										2		2
Chambers				3	3	6						
Cherokee					1	1						
Chilton				3		3						
Choctaw		1	1									
Clarke						2						
Clay												
Cleburne												
Coffee				1		1						
Colbert				16	7	23			1			
Conecuh				1		1						
Coosa												
Covington												
Crenshaw												
Cullman				1	1	2	1		1			
Dale												
Dallas				6	6	30						
DeKalb	1		1	3		3						
Elmore				2	1	3			1			
Escambia												
Etowah				2	1	3						
Fayette												
Franklin						1						
Geneva				1		1						
Greene												
Hale												
Henry												
Houston										1		1
Jackson												
Jefferson			1	82	38	124			4		2	2
Lamar						2						
Lauderdale					2	4			2	1		1
Lawrence				1	1	2						
Lee				1		1				1		1
Limestone						6					1	1
Lowndes												
Macon												
Madison				6	1	10						
Marengo										1		1
Marion						8						
Marshall	1		1	2		2						
Mobile	3		3	5	1	6						
Monroe												
Montgomery				16	11	28	2		9		1	1
Morgan				3		4						
Perry				2		2						
Pickens												
Pike				1		1						
Randolph												
Russell												
St. Clair				3		3						
Shelby				4	2	6						
Sumter												
Talladega				2	3	5						
Tallapoosa												
Tuscaloosa				7		7			1			
Walker				6		6						
Washington												
Wilcox					2	2						
Winston						1						

Total includes reports not stating race.

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	CHICKENPOX			ENCEPHALITIS			GERMAN MEASLES			INFLUENZA		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	75	47	792	10	2	12	1	2	3	93	21	350
Autauga												
Baldwin												
Barbour			7									6
Bibb												
Blount			1									
Bullock												
Butler												
Calhoun	3		3					1	1			2
Chambers	4	2	9	1	1	2					1	2
Cherokee												
Chilton												
Choctaw												
Clarke												
Clay			3									
Cleburne	23	2	25									
Coffee												
Colbert										1		3
Conecuh												
Coosa												
Covington												
Crenshaw												
Cullman												
Dale												
Dallas												
DeKalb										4		6
Elmore												5
Escambia	1		7									
Etowah	1		25	1		1				1		127
Fayette												
Franklin				1		1						
Geneva												
Greene												
Hale												
Henry												
Houston			91									
Jackson			6									15
Jefferson	19	11	31	2		2	1	1	2	43	12	58
Lamar												
Lauderdale.												12
Lawrence												
Lee			19									
Limestone			1									1
Lowndes												
Macon												
Madison	3	8	12	1	1	2				7		7
Marengo												
Marion												
Marshall	3		3							25		25
Mobile	1	4	452	2		2				2		2
Monroe	1	7	29									3
Montgomery	3	1	4								1	2
Morgan												
Perry		6	16									19
Pickens	2	1	3									
Pike												
Randolph												
Russell	3	1	7									
St. Clair	1		2							1		11
Shelby	2	1	21	1		1				7		22
Sumter			4									13
Talladega	2	2	4							2	7	9
Tallapoosa												
Tuscaloosa	1	1	2									
Walker	1		4									
Washington				1		1						
Wilcox												
Winston	1		1									

Total includes reports not stating race

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	HEPATITIS INFECTIOUS			HEPATITIS SERUM			HEPATITIS UNSPEC.			MALARIA		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	192	44	237	165	106	273	114	24	138	2	6	8
Autauga							1		1			
Baldwin	2	1	3	1		1	2		2			
Barbour		1	1									
Bibb												
Blount	2		2	1		1	1		1			
Bullock		1	1		1	1						
Butler												
Calhoun	4		4	13	1	14	5	1	6			
Chambers	1	1	2	1	1	2	2	1	3			
Cherokee	1		1				1		1			
Chilton	1		1									
Choctaw	1	1	2				1		1			
Clarke	5	1	6									
Clay	3		3									
Cleburne	1		1									
Coffee	1		1	1		1						
Colbert	1		1	1		2	1		1			
Conecuh	1		1					1	1			
Coosa					2	2						
Covington				1		1						
Crenshaw												
Cullman	4		5	5		5	3		3			
Dale	6		6	3	1	4		1	1			
Dallas							1		1			
DeKalb												
Elmore	2		2		1	1	1		1			
Escambia				2		2						
Etowah	15	1	16	5		5	10		10			
Fayette	1		1				1		1			
Franklin				1		1						
Geneva												
Greene		1	1									
Hale				1		1						
Henry		1	1	2		2						
Houston	1		1				1		1			
Jackson	1		1	4	1	5	2		2			
Jefferson	26	17	43	43	61	104	35	12	47			
Lamar												
Lauderdale	4	1	5	2		2						
Lawrence				1		1						
Lee				1		1						
Limestone	2		2		1	1	2		2			
Lowndes		1	1									
Macon												
Madison	7		7	5	2	8	1		1			
Marengo												
Marion					1	1						
Marshall	8		8	1		1	20		20			
Mobile	37	8	45	40	23	63	9	4	13	1	6	7
Monroe	3	1	4	2		2						
Montgomery	6	4	10	5	5	10	6	3	9			
Morgan	16	2	18	4	1	5						
Perry												
Pickens	2		2	1	1	2						
Pike	1	1	2									
Randolph												
Russell												
St. Clair	3		3	1		1	1		1			
Shelby	7		7									
Sumter												
Talladega	1		1	3		3	1	1	2			
Tallapoosa	2		2									
Tuscaloosa	9		9	11	2	13	1		1	1		1
Walker	2		2	2	1	3	1		1			
Washington	1		1				1		1			
Wilcox												
Winston	1		1	1		1	3		3			

Total includes reports not stating race

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	LEPTOSPIROSIS			PSITTACOSIS			TULAREMIA					
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State			1	2		2		2	2			
Autauga												
Baldwin												
Barbour												
Bibb												
Blount												
Bullock												
Butler												
Calhoun												
Chambers												
Cherokee												
Chilton												
Choctaw												
Clarke												
Clay												
Cleburne												
Coffee												
Colbert												
Conecuh												
Coosa												
Covington												
Crenshaw												
Cullman												
Dale												
Dallas												
DeKalb												
Elmore												
Escambia												
Etowah												
Fayette												
Franklin												
Geneva												
Greene								1	1			
Hale												
Henry												
Houston			1	1		1						
Jackson												
Jefferson								1	1			
Lamar												
Lauderdale												
Lawrence												
Lee												
Limestone												
Lowndes												
Macon												
Madison												
Marengo												
Marion												
Marshall												
Mobile												
Monroe												
Montgomery												
Morgan				1		1						
Perry												
Pickens												
Pike												
Randolph												
Russell												
St. Clair												
Shelby												
Sumter												
Talladega												
Tallapoosa												
Tuscaloosa												
Walker												
Washington												
Wilcox												
Winston												

Total includes reports not stating race.

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	MEASLES			MENINGITIS MENINGOCOCCAL			MENINGITIS ASEPTIC			MUMPS		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	8	8	22	36	19	58	418	103	537	8	7	36
Autauga	1		1	2		2						
Baldwin				1		1	2		2			
Barbour	3		3									1
Bibb												
Blount							69	2	72			
Bullock												
Butler												
Calhoun	2	4	12		1	1						3
Chambers												
Cherokee							1		1			
Chilton				1		1						
Choctaw												
Clarke					1	1	1	1	2			
Clay												1
Cleburne												
Coffee												
Colbert												2
Conecuh					2	2						
Coosa												
Covington					1	1						
Crenshaw												
Cullman							14		16			
Dale	1	3	4									
Dallas					1	1	2		2			
DeKalb				1		1	2		2			1
Elmore	1		1	1		1	1		1	2	1	3
Escambia						1				1		1
Etowah							9	3	12			1
Fayette												
Franklin												
Geneva							1		1			
Greene												
Hale					1	1						
Henry												
Houston				5		6						2
Jackson												
Jefferson				7	1	8	230	79	320			
Lamar												
Lauderdale												
Lawrence							2		2			
Lee		1	1	1		1						1
Limestone					1	1			1			
Lowndes												
Macon												
Madison				2	2	4	2	1	3		1	1
Marengo												
Marion										1		1
Marshall				1		1	5	1	6	1		1
Mobile				7	1	8	22	9	31		4	11
Monroe												
Montgomery				1	4	5		2	2			
Morgan				2	1	3	3		3			1
Perry												
Pickens										1		1
Pike												
Randolph												
Russell				1		1						1
St. Clair							13		14			
Shelby							19		19			
Sumter				1		1						
Talladega						1	1	2	3		1	1
Tallapoosa								1	1			
Tuscaloosa				1	1	2	4		4			
Walker				1		1	11	1	12			
Washington					1	1	2		2	2		2
Wilcox								1	1			
Winston							2		2			

Total includes reports not stating race

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	PNEUMONIA			RHEUMATIC FEVER			RHEUMATIC HEART			ROCKY MT. SPOTTED FEVER		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	2250	968	5349	10	3	13	58	15	73	18		18
Autauga	1	1	2							1		1
Baldwin	2	1	3									
Barbour			14					1	1			
Bibb	1		1									
Blount	1		1	1		1	2		2			
Bullock												
Butler	2	1	3				1		1			
Calhoun	6	5	11				1	1	2	2		2
Chambers	96	114	213				1		1			
Cherokee												
Chilton	2		2				1		1			
Choctaw	1		1									
Clarke	2		2									
Clay												
Cleburne												
Coffee							1		1			
Colbert	1	1	25									
Conecuh												
Coosa												
Covington												
Crenshaw	1	1	2									
Cullman	4		4				2		2			
Dale		1	1				1		1			
Dallas	7	2	9					2	2			
DeKalb	7		8				2	1	3	1		1
Elmore	10	4	48									
Escambia	1	1	2					1	1			
Etowah	6		349	3		3	1	1	2	2		2
Fayette										1		1
Franklin	1		2									
Geneva	1		1				1		1			
Greene			1									
Hale							1		1			
Henry												
Houston	2	1	7					1	1			
Jackson												
Jefferson	1238	621	1877	2	2	4	14	3	17	2		2
Lamar										1		1
Lauderdale	1		1				1		1	1		1
Lawrence												
Lee	2		2				3		3			
Limestone	5	1	230							1		1
Lowndes												
Macon								1	1			
Madison	72	5	89				1		1			
Marengo	1	2	118									
Marion							2		2			
Marshall	353	1	355	3		3	3		3			
Mobile	75	40	1405	1		1	5	1	6			
Monroe	3		3									
Montgomery	87	63	153		1	1	5	1	6			
Morgan	1		1				1		1	2		2
Perry			11									
Pickens												
Pike												
Randolph	2		2									
Russell												
St. Clair	1		1				2		2			
Shelby	14	3	30									
Sumter			18					1	1			
Talladega	59	95	155				1		1			
Tallapoosa	1		1				1		1			
Tuscaloosa		3	4				3		3	2		2
Walker	4		4				1		1	2		2
Washington	1		1									
Wilcox												
Winston	175	1	176									

Total includes reports not stating race.

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	SALMONELLA			SCARLET FEVER*			SHIGELLOSIS			TETANUS		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	44	11	534	266	134	1730	16	23	157	3	1	4
Autauga												
Baldwin			1			5						
Barbour												
Bibb												
Blount	1		1						1			
Bullock												
Butler			2									
Calhoun			7					1	1			
Chambers				8		36						
Cherokee						1						
Chilton												
Choctaw												
Clarke												
Clay												
Cleburne												
Coffee	1		6	1		1	1		4			
Colbert	2		3	13	3	75						
Conecuh			6									
Coosa												
Covington				2	1	5				1		1
Crenshaw					1	1						
Cullman	2		3	1		1						
Dale			29	2		5			4			
Dallas			3									
DeKalb						5						
Elmore	3		8	5		32		1	2			
Escambia	1	1	3									
Etowah			18	1		152			1	1		1
Fayette												
Franklin												
Geneva												
Greene			1									
Hale												
Henry			2									
Houston			24			239		1	5	1		1
Jackson												
Jefferson	2	3	142	38	46	88		2	30			
Lamar												
Lauderdale		1	9	2		5	1	1	2			
Lawrence												
Lee			4									
Limestone			2	1		56						
Lowndes			1									
Macon												
Madison	1		12	153	81	256			1			
Marengo			2	2		2						
Marion							1		1			
Marshall				5		5						
Mobile			110	2	1	721	2	6	41		1	1
Monroe			2									
Montgomery	8	1	62	2	1	4	2	4	24			
Morgan			6									
Perry												
Pickens			1									
Pike	18		29						1			
Randolph												
Russell			3	1		1			1			
St. Clair								1	3			
Shelby	1		1	6		12						
Sumter												
Talladega				1		1						
Tallapoosa									1			
Tuscaloosa	4	5	31	4		5	9	6	33			
Walker									1			
Washington												
Wilcox												
Winston				16		16						

Total includes reports not stating race.

*Includes strep. throat.

COMMUNICABLE DISEASE MORBIDITY BY COUNTY AND RACE

	TUBERCULOSIS			TYPHOID FEVER			UNDULANT FEVER			WHOOPING COUGH		
	No. of Cases			No. of Cases			No. of Cases			No. of Cases		
	W	C	Tot.	W	C	Tot.	W	C	Tot.	W	C	Tot.
Entire State	296	367	663	2	1	4	4	1	6	2	1	3
Autauga		2	2									
Baldwin	4		4							1		1
Barbour	1	2	3									
Bibb	3	2	5									
Blount	3		3									
Bullock		2	2									
Butler		1	1									
Calhoun	5	15	20									
Chambers		3	3									
Cherokee	5	1	6				1		1			
Chilton	3	2	5									
Choctaw												
Clarke	3		3									
Clay	2	1	3									
Cleburne												
Coffee	3		3									
Colbert	3	6	9									
Conecuh		2	2				1		1			
Coosa	2		2									
Covington	4		4									
Crenshaw	1	1	2									
Cullman	6		6									
Dale	1	2	3									
Dallas		16	16									
DeKalb	6		6									
Elmore	5		5									
Escambia		1	1									
Etowah	9	15	24				1		1			
Fayette	1	1	2									
Franklin	6		6									
Geneva	4		4									
Greene		2	2									
Hale		2	2									
Henry												
Houston	6	10	16									
Jackson	8	1	9									
Jefferson	52	107	159			1						
Lamar		1	1									
Lauderdale	11	3	14						1			
Lawrence	2	2	4									
Lee		3	3									
Limestone	9	1	10									
Lowndes		1	1									
Macon		3	3									
Madison	17	18	35									
Marengo		2	2									
Marion	3		3									
Marshall	9		9									
Mobile	27	45	72	1		1					1	1
Monroe		1	1									
Montgomery	11	35	46	1		1						
Morgan	6	5	11									
Perry	1	1	2									
Pickens	2	4	6		1	1						
Pike		2	2							1		1
Randolph		2	2									
Russell	3	3	6									
St. Clair	6	2	8									
Shelby	4	2	6									
Sumter	1	2	3									
Talladega	6	5	11									
Tallapoosa	4	1	5									
Tuscaloosa	14	22	36				1	1	2			
Walker	7	2	9									
Washington	1		1									
Wilcox	1	2	3									
Winston	5		5									

Total includes reports not stating race

DISEASE INCIDENCE BY AGE GROUPS

Age Group	AMEBIC DYSENTERY					LEPTOSPIROSIS					PSITTACOSIS					TULAREMIA					UNDULANT FEVER				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4																									
5- 9																									
10-14																					1				1
15-19										1													1		1
20-24																			1	1	1				1
25-34		1			1																1				1
35-44	2	1			3						1				1										
45-54		1	1		2							1			1						1				1
55-64																									
65-74																		1		1					
75 +																									
N.S.					1																				1
Total by Race	5		1								2							2			4		1		
Total	6					1					2					2					5				
Unclassified	1					0					0					0					1				
Grand Total	7					1					2					2					6				

DISEASE INCIDENCE BY AGE GROUPS

Age Group	ENCEPHALITIS					HEPATITIS INFECTIOUS					HEPATITIS SERUM					HEPATITIS UNSPECIFIED					INFLUENZA				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4						2	1			3							2			2		1	2	2	6
5- 9	1		1		2	3	3		1	7						3	2			5	3	1	1	1	6
10-14	1				1	7	6			13	2				2	2	4			6	4	4			8
15-19	2				2	12	15	1	7	35	9	15	4	10	38	2	7	1	2	12	3	3	2		8
20-24						23	18	6	8	55	28	20	29	16	94	11	7	3	4	25	1	2	1		4
25-34		3	1		4	24	17	4	3	48	25	16	20	11	72	13	5	2	1	21	4	7		3	15
35-44						11	4	1	3	19	16	7	6	4	33	6	2	1	2	11	2	9			11
45-54	1				1	7	10	2		19	4	3		3	10	8	13	1	1	23	3	5		1	10
55-64						1	11	2	2	16	5	5	2		12	6	5		3	14	13	4	2	2	22
65-74		1			1	5	5	1		11	1	4	1		6	6	5	2	1	14	5	9	1	1	17
75 +		1			1	2	2		3	7	2	3			5	1	4			5	4	6	1	1	12
N.S.						2	1			4					1										231
Total by Race	10		2			192		44			165		106			114		24			93		21		
Total	12					236					271					138					114				
Unclassified	0					1					2					0					236				
Grand Total	12					237					273					138					350				

DISEASE INCIDENCE BY AGE GROUPS

Age Group	MALARIA					MENINGITIS MENINGOCOCCAL					MENINGITIS ASEPTIC					PNEUMONIA					ROCKY MT. SPOTTED FEVER				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4			1		1	8	10	6	3	27	33	36	25	28	126	193	137	171	138	680	1	2			3
5- 9			2		2	4	2		2	8	41	26	9	3	79	61	53	24	29	183	2	2			4
10-14							2	1	2	7	48	32	5	1	87	40	23	14	8	95	5				5
15-19			1		1	2	1	2	1	6	26	33	6	3	71	35	21	17	9	87	1				1
20-24	1	1			2	1				2	18	33	3	5	59	27	17	15	10	75					
25-34				2	2						30	36	6	7	81	48	53	25	27	172	1	1			2
35-44						2			1	3	4	13		1	20	59	53	34	15	173	2				2
45-54							1	1		2		1			1	75	101	37	24	260					
55-64							1			1	3	4			7	156	134	54	32	400	1				1
65-74						1				1				1	1	201	181	81	54	562					
75 +												1			1	252	328	80	69	794					
N.S.						1				1					4		2	1		1868					
Total by Race	2		6			36		19			418		103			2250		968			18				
Total	8					55					521					3218					18				
Unclassified	0					3					16					2131					0				
Grand Total	8					58					537					5349					18				

DISEASE INCIDENCE BY AGE GROUPS

Age Group	SALMONELLA					SHIGELLOSIS					TETANUS					TUBERCULOSIS					TYPHOID FEVER				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
0- 4	4	7	2	4	78	4	3	7	8	30						3	1	2	4	10					1
5- 9	5	3			12		6		1	8						1	2	1	1	5	1				1
10-14	2	1			9	2				5						1		2	2	5					
15-19					2				1	2						1	1	4	7	13	1				1
20-24	1				9				3	5						3	6	7	8	24					
25-34	1	3		1	15		1			4						13	5	27	14	59					
35-44	1	1	1		9							1			1	18	2	20	12	52					
45-54			2		10					1	1				1	26	9	34	9	78					
55-64		3			14			1		1						31	12	33	13	89				1	1
65-74	2		1		9			1		1						39	19	45	8	111					
75 +	1				5							1		1	2	38	15	40	17	110					
N.S.	3	6			362				1	100						35	15	44	13	107					
Total by Race	44		11			16		23			3		1			296		367			2		1		
Total	55					39					4					663					3				
Unclassified	479					118					0					0					1				
Grand Total	534					157					4					663					4				

DISEASE INCIDENCE BY AGE GROUPS

Age Group	CHICKENPOX					GERMAN MEASLES					HISTOPLASMOSIS					LEGIONNAIRES' DISEASE					MEASLES				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1			2		2																				
1	4	2	2	1	10																1				1
2	5	2	4	7	18																			1	1
3	4	4	2	1	11																				
4	1	1		1	4																				
5	2	2	5	4	14																			1	1
6	7	3	3	3	16										1									2	2
7	3	7		1	11																1				1
8	3	2		2	7																				
9	1	4		1	6																				
10	1	1	1	1	4																				
11				2	2																				
12	1			2	3																				
13	2	2			5																1	1			2
14	2	1			3										1										
15-19	1	2	1		4						1				1						2	1	2		11
20-24		1			1			1		1					1						1		2		3
25-34		2			2		1		1	2															
35-44																2		1		3					
45-54												1			1			1		1					
55-64		1			1											2		1		3					
65-74												1			1	2		1		3					
75 +																									
N.S.	1		1		668							1			15										
Total by Race	75		47			1		2			4					6		4			8		8		
Total	122					3					4					10					16				
Unclassified	670					0					17					0					6				
Grand Total	792					3					21					10					22				

DISEASE INCIDENCE BY AGE GROUPS

Age Group	MUMPS					RHEUMATIC FEVER					RHEUMATIC HEART					SCARLET FEVER*					WHOOPING COUGH				
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1			1		1												2	2	1	20		2		1	3
1																2	1	1	2	7					
2	1		2		3											7	4	2	2	16					
3	1			1	2											4	9	5	2	20					
4																3	3	5	6	18					
5																8	9	3	2	28					
6			1		1											10	7	4	5	31					
7							1			1						7	15	3	4	33					
8					1	1				1						2	6	1	1	14					
9		1			1		1			1						5	5	2	1	15					
10							1			1						6	6	1	4	23					
11			1		1		1			1						9	2	3	5	20					
12	1				1	1				1						4	2	4	2	13					
13														1	1	2	1	1	1	8					
14	1				1											1	3	1	2	9					
15–19					1	1		1	1	3		1			1	9	14	7	10	59					
20–24											1	2			3	12	13	7	4	53					
25–34		2			2	1	1			2	1				1	20	15	7	9	64					
35–44											2	2			4	10	4	1	3	33					
45–54							1	1		2	1	5	3	1	10	5	6	1	3	28					
55–64			1		1						6	8	3	3	20	2	5	1	1	14					
65–74											4	14	1	3	22		3		1	6					
75 +											4	6			10				1	2					
N.S.	1				20						1				1		3			1196					
Total by Race	8		7			10		3			58		15			266		134			2		1		
Total	15					13					73					400					3				
Unclassified	21					0					0					1330					0				
Grand Total	36					13					73					1730					3				

*Includes strep throat

DISEASE INCIDENCE BY AGE GROUPS

Age Group	INFANT DIABETES																								
	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total	White		Colored		Total
	M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F		M	F	M	F	
Under 1																									
1	2		1		3																				
2		2	2		4																				
3		3	1		4																				
4	2	1		1	4																				
5		1			1																				
6		4			5																				
7	1	3		1	5																				
8	5	1	1	2	9																				
9	3	7		1	12																				
10	5	4		5	15																				
11	2	4		3	9																				
12	3	4			7																				
13	1	5	1	2	9																				
14	1	3	2		7																				
15–19	10	19	6	10	49																				
20–24	3	8	5	4	28																				
25–34	18	34	15	7	90																				
35–44	16	11	6	6	54																				
45–54		1			3																				
55–64																									
65–74																									
75 +	1				1																				
N.S.					1																				
Total by Race	188		82																						
Total	270																								
Unclassified	50																								
Grand Total	320																								

Division of Women, Infants and Children (WIC)

The Special Supplemental Food Program for Women, Infants and Children (WIC) continued to grow during 1980. With the addition of Madison County to the program in June 1980, the WIC Program became operational statewide.

The purpose of the WIC Program is to serve as an adjunct to good health care during critical times of growth and development in order to prevent the occurrence of health problems and to improve the health status of participants. The WIC Program is designed to promote health by providing specific nutritious foods as supplements to diets of pregnant and nursing women, infants and children up to five years of age. Participants must be determined by competent professionals (physicians, nutritionists, nurses) to be at nutritional risk because of inadequate diets and inadequate income.

Specific nutritious foods provided to eligible participants are milk, eggs, cheese, cereal fortified with iron, citrus juices and iron-fortified infant formula.

In addition to supplemental foods, participants received nutrition education delivered by nutritionists, nurses and trained clerical personnel in the local program areas. This education included a discussion of the participant's nutritional needs, information on the use of the supplemental foods and their nutritional value, and an explanation of the importance of health care. Nutritionists also provided in-service education to local health department staff members. Referrals were made to health department clinics and agencies in the community as appropriate.

The WIC Program is funded by the United States Department of Agriculture with unmatched federal funds. In fiscal year 1980 funds totaling $17,690,640 provided WIC benefits to 94,534 individuals. This was an increase of $5,416,714 in funding and 16,004 persons served. An average of 46,609 participants per month were served. The average expenditure for the food provided amounted to $27.27 per month for each individual.

Because the WIC Program became operational statewide in 1980, only two new programs were started during the year; however as funds became available, existing programs were allowed to grow in number of participants based upon the need in the program area. This need was determined through the use of a case-load management formula which was outlined in the WIC Program State Plan.

At the end of the report period, the statewide WIC Program was administered by 59 local agencies in 115 different clinic locations.

With the growth of the program, personnel requirements for administering the program grew. By the end of the report period, the statewide WIC staff was made up of three administrators, 112 clerical personnel, 55 nurses and 45 nutritionists.

Four two-day orientation training sessions were provided to 72 new employees of the WIC Program by the state WIC staff. In addition special in-service training on measurement methods (100 participants), nutrition education update (60 participants) and writing of nutrition education plans (15 participants) were provided to the professional staff.

Future growth of the program will depend upon the availability of funds. It is estimated that at the end of 1980 the WIC Program was serving approximately 26 percent of the people eligible to participate in the program. From this figure one can see that the WIC Program in Alabama has much room for future growth.

Bureau of Clinical Services

Division of Cancer Control

After a detailed study of the Central Cancer Registry during 1980, cancer remains a reportable disease; however the detailed reporting and record keeping previously required have been reduced in scope by action of the State Committee of Public Health on December 17, 1980.

Physicians are still required by law to report cancer. Cancer cases should be reported on the Notifiable Disease Case Report (ADPH-F-EPI-22/Rev. 8-80) or on its predecessor (PD Morbidity 1, Rev. 8-1-74).

Both the Cancer Registry and the Tumor Clinic Assistance program were transferred from the Bureau of Clinical Services to the new Bureau of Epidemiology and Medical Consultation, Cancer Cases Division, effective January 1, 1981.

Cancer Detection Division

The responsibility of this division is to screen Alabama's asymptomatic female population 35 years of age and older for cancer of the uterine cervix, endometrium and breast and to refer patients with abnormal test results to their own private physicians for appropriate treatment and follow-up.

Since there is no known practical way to prevent these cancers, these efforts are taken to discover cancer early, to arrest its progress and to prevent complications resulting from it. When cancer is detected in its early stages, the cure rate is very high, with some studies showing five-year survival rates as high as 95 percent among early cancer victims.

In 1977 the National Cancer Institute estimated that curing a patient who is diagnosed early rather than treating the terminally ill saves $24,000. From this figure it can be calculated that a savings of $1,512,000 accrued for the 63 patients the Cancer Detection Program in 1980 identified in the early, curable stages. This sum was saved with an expenditure of $380,000 to operate the Cancer Detection Division—an approximate 400 percent return on the taxpayers' investment.

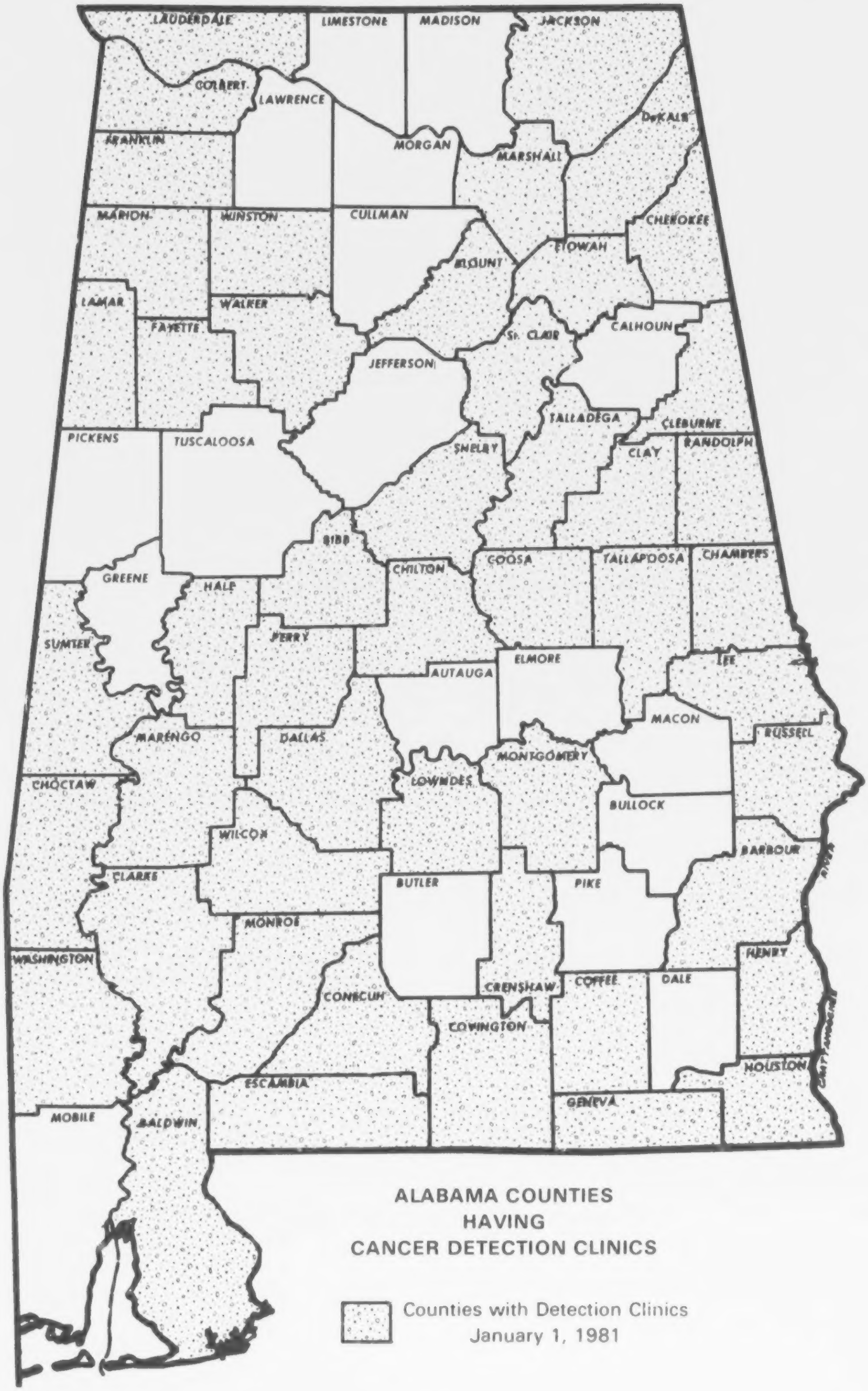
There were 71 more patients with abnormal cytology who have not yet been heard from since many patients discovered in the last half of the year remain undiagnosed but are being closely scrutinized by their private physicians. Emotional and psychological trauma as well as expenses will undoubtedly be reduced by these patients receiving expeditious medical care.

According to the National Cancer Institute, Alabama has the best patient follow-up program in the nation. Follow-up efforts, referrals and controls assure that every patient with abnormal pathology receives immediate attention in order to avoid unnecessary waste of valuable time for proper patient management. During 1978 one patient out of 105 with abnormal tests refused patient follow-up for a 99.1 percent success rate. Of the 173 patients with abnormal pathology in 1979, two died with metastatic disease and three have refused to cooperate with follow-up efforts—a 97.1 percent successful follow-up rate. Among the 152 patients for 1980, approximately half of them continue under their private physicians' surveillance but none has been lost to follow-up so far (a 100 percent rate).

During 1980 Pap tests were provided for 20,714 women among the target population; of whom 152 were found with cervical cytopathology suggestive of cancer. Almost twice as many abnormal test results were found among the repeat patients (96) than among the new patients who had never been to the clinics of this division before (50).

Early in 1980 the American Cancer Society issued new guidance for its field staff on the frequency of Pap tests: "If a patient has negative Pap tests two years in succession, the patient may then wait three years before getting another one." Because of this maxim the division checked its records to determine if concurrence was justified. It was found that 68 clinic patients who had had normal Pap tests in 1977 and 1978 were abnormal in 1979. Four of them had invasive disease which had developed during the previous year. In fact one of them had died. After consultation with the State Ob-Gyn Society and the Alabama Cancer Coordinating Council, the division decided to continue strongly recommending annual Pap tests as before, especially since Alabama continues to rank among the national leaders in deaths from these types of cancers. The medical communities have accepted this undertaking and continue to cooperate with the publicity, educational efforts, screening, referral and follow-up processes. Meanwhile the general public and target population have responded well.

Expansion was limited in 1980 to only one county with Baldwin becoming the 49th county to establish and maintain ongoing cancer detection clinics. Normal inflation


LAUDERDALE
LIMESTONE
MADISON
JACKSON
COLBERT
LAWRENCE
DeKALB
FRANKLIN
MORGAN
MARSHALL
MARION
WINSTON
CULLMAN
CHEROKEE
BLOUNT
ETOWAH
LAMAR
WALKER
FAYETTE
St. CLAIR
CALHOUN
JEFFERSON
TALLADEGA
CLEBURNE
PICKENS
TUSCALOOSA
SHELBY
CLAY
RANDOLPH
BIBB
GREENE
HALE
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
SUMTER
PERRY
AUTAUGA
ELMORE
LEE
MARENGO
DALLAS
MACON
RUSSELL
MONTGOMERY
LOWNDES
CHOCTAW
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE
MONROE
HENRY
WASHINGTON
CRENSHAW
COFFEE
DALE
CONECUH
COVINGTON
ESCAMBIA
HOUSTON
GENEVA
MOBILE
BALDWIN
RIVER
CHATTAHOOCHEE

ALABAMA COUNTIES
HAVING
CANCER DETECTION CLINICS

▨ Counties with Detection Clinics
January 1, 1981

continues to bite into the operating funds which were not increased in 1980 in spite of an approximate 12 percent inflation increase. Similar inflation is expected in 1981. Additional funding therefore is essential to maintain the current operational levels and yields through finding early, curable cancer. Cost-effectiveness and cost-benefit have continually been demonstrated since the inception of the Cancer Detection Division. Unserved and underserved areas of Alabama deserve the same considerations as those fortunate areas already being served, but the anxiety and despair of cancer cannot be obviated without increased funding to maintain current operations and to expand into the remaining eighteen counties which include Mobile, Jefferson, Madison and Tuscaloosa.

Division of Hypertension

National and state efforts to bring high blood pressure under control have been under way for the past seven years. Hypertension, or high blood pressure, is a major preventable threat to life, but it can be diminished by the actions of community groups, health professionals and government. A condition which is the leading cause of heart disease and stroke and which is present in at least one of every five people in each community across Alabama must be considered a community health problem.

The Alabama High Blood Pressure Control Program in 1980 continued its work based on three key premises: First, that sufficient funds to involve all communities may never be possible and that there is a need to prioritize high-risk areas. Second, that the problem is not a lack of scientific know-how for the most part but a lack of universal acceptance and application of knowledge. Third, that the means to achieve both acceptance and application of knowledge is through program education.

PRIORITIES—During 1980 Alabama's High Blood Pressure Program prepared two federal applications, one for supplemental funding for fiscal year 1980 and another for continued funding for fiscal year 1981. Both applications contained a new focus on targeting scarce resources into a 16- county, high-risk area of Alabama. The area which is mostly rural is often called the "black belt"—a name coined to describe the rich dark soil. In the area 47 percent of the population is black compared to 25 percent statewide. Target area counties average 37 percent of the population below the poverty level as compared to a 27 percent state figure. All 16 counties have been designated wholly medically underserved areas. Based on the most current data available, the target county rate for heart disease and stroke mortality exceeded the total state rates rather strikingly, 390.4 to 313.8 and 177.9 to 113.4 respectively.

In order to facilitate target area efforts, two plans of action were initiated in 1980. The program subcontracted funds for the first time to organizations who would assist in the target area, and the Alabama High Blood Pressure Control Program committed itself to expand its comprehensive control units only in the target area in the future.

In June of 1980 the program through a federal grant received approval to subcontract with the American Heart Association, American Rural Health Association, Tuskegee Area Health Education Consortium and UAB in Birmingham.

The foundation of the proposal was a carefully developed sampling scheme to screen at least 4,000 high-risk people for hypertension. In addition to screening for disease, the sampling was expected to result in a better estimate of prevalence from which to make management decisions and prioritize effectively; identification of medical treatment resources, linkage systems and volunteer groups and organizations; protocols for screening and follow-up; uniform screening tools; testing protocols for educating and motivating minorities and the hard-to-reach; a management information and tracking system; a plan to initiate ongoing programs; and a symposium and published report of experiences and findings.

The results of these subcontracts will have products which will be both immediately available for decision making by the state and others and products which will have long-term impact upon the target area and other areas of the state in future years.

The proposal also fitted in well with plans by the state to expand its program into portions of the target area.

Unfortunately the fiscal year 1981 federal award did not allocate [illegible] funds to expand the comprehensive control units into half of the target areas as expected. But late in 1980 planning was started to add three additional county areas to the eight already in existence. In these counties screening, referral, follow-up and blood pressure treatment for the medically indigent are provided through state funds.

COMPREHENSIVE BLOOD PRESSURE CONTROL UNITS—During 1980, 9,795 individuals were first screened by this program. Of this number 3,287 or 33.5 percent either had elevations or had histories of high blood pressures. A single screening lacks specificity; therefore the program was able to get 2,873 or 87 percent to return for a second or multiple screenings. At the second screening 2,545 or 89 percent remained elevated.

A total of 733 hypertensives was enrolled in the program either in a full care or joint care capacity with private physicians. Despite enrolling 733 new patients for a total of 2,155 on medication, the program lost 334 patients, resulting in a net gain of 399. A drop-out rate of 334 out of 2,155 patients or 15 percent as the program experienced is considered excellent. Patients drop out for a variety of reasons, and patient compliance is one of the most universal problems in blood pressure control.

Despite the low drop-out rate, it could have possible been lower if the program had not encountered intermittent shortages of medication owing to funding. The program also attributed its slower than usual growth rate to the same problem. Program nurses were in some cases reluctant to enroll new patients due to temporary drug shortages.

In terms of patient revisits, the program served 16,309 people, eclipsing last year's mark of 12,576. And that number does not include non-patient monitoring which for the last three months of 1980 alone totalled 4,401.

Continuing a precedent established a year earlier, Chambers, DeKalb and Dallas counties conducted Patient Appreciation Days for their high blood pressure patients. During these get-togethers, patients were rewarded for keeping their blood pressure under control, and the community was made aware of how effective the program has become in terms of preventing premature death and enhancing the quality of life.

EDUCATION—Even the harshest critics of public health education have become believers in the role education plays in controlling blood pressure. Alabama, in concert with the National High Blood Pressure Education Program, since 1975 has been heavily involved in public awareness campaigns. It is hard to argue with the fact that in the past five years deaths from hypertension-related diseases have continued to decline at a much sharper rate than those categories of cardiovascular diseases not related to hypertension.

High blood pressure awareness and public education programs are available on a statewide basis and account for a significant portion of total program efforts. The demand for high blood pressure literature is large. Although the last quarter of the year is not a high use time, over 9,700 pieces of literature were mailed to various individuals and organizations during that time.

As in all preceding years since the program began, the Alabama High Blood Pressure Program was a major sponsor of High Blood Pressure Month in May. During that month publicity efforts reached a peak in terms of public service announcements, continuing education programs and health fairs. In May of 1980 the hypertension program was again a key sponsor of a traditional statewide high blood pressure conference. This year's theme was "High Blood Pressure in the Worksetting and in Rural Settings."

In regard to high blood pressure control in the worksetting, the program published *An on the Job Blueprint for Blood Pressure Control* which is available statewide to industry. Employers as well as employees have a large stake in controlling hypertension in this state. It is estimated that 242,500 hypertensive Alabamians are in the labor force. Nationally it is estimated that $8.6 million in wages and 52 million man-days of production are lost each year as a result of cardiovascular disease. Additional efforts in this area included producing and staffing a display for a regional worksetting conference held in Birmingham.

Success through 1980 in controlling hypertension is encouraging where funds have been available, but it also represents a challenge to complacency. Continued progress will depend on sustaining current interest and activity while gradually expanding into new areas of Alabama at highest risk.

TIME/PROGRESS CHART FOR TARGET HYPERTENSIVE POPULATIONS
1980

County	Days of the Week in Operation	Months in Operation	Population Over 18 Years	Number Screened Over 18 Years	Percent Over 18 Years Screened	Estimated Hypertensives Below Poverty	Total On Program Therapy	Percent below Poverty Reached and on Program Therapy
Chambers	5	73	23,776	13,266	55.8	707	275	38.9
Dallas	5	53	33,122	5,875	17.7	1,564	598	38.2
Calhoun	5	50	68,040	10,998	16.2	1,694	530	31.3
Coffee	2.5	49	22,318	5,099	22.9	666	255	38.3
Geneva	2.5	49	14,645	4,720	32.2	557	150	26.9
Randolph	2	45	12,336	1,801	14.6	506	141	27.9
Bibb	5	37	8,362	6,096	72.9	385	105	27.3
DeKalb	5	35	28,169	6,561	23.3	1,242	101	8.1
TOTALS			210,768	54,416	25.8	7,321	2,155	29.4

Division of Immunization

The Division of Immunization consists of two separate programs: the Immunization Program and the Influenza Program.

IMMUNIZATION PROGRAM—The ultimate goal of any immunization program is to prevent disease. The Alabama Immunization Program is pleased to report that for 1980 Alabama had the third lowest rate (per 100,000) of vaccine-preventable diseases in the nation. Activities in 1981 will enhance Alabama's nationwide ranking in eliminating vaccine-preventable diseases as a threat to the health of its residents.

Highlights of 1980 include statewide implementation of the amended compulsory school immunization law, formulation of a hospital-based new mother education program, acquisition of two desk-top computer terminals and displays and the addition of the elimination of indigenous measles by 1982 as a project goal.

Local health department immunization clinics were extremely busy all year with school-age children needing immunizations, record checks and certificates of immunization or exemption. Many counties held special clinics or extended existing clinic hours to meet the needs of students in their community. News releases and promotional materials were developed at the state level to support local activities. A poster, "It's the Law, " was developed in the State's Immunization Program office and distributed statewide. It was received favorably and will be used in future years. Another promotional project was the designation of April 1980 as "Immunization Action Month" by Governor Fob James. Present at the signing of the proclamation were Immunization Program staff and representatives of education, the private sector and the Alabama Task Force on Immunization Activities.

Because the legislation expanding the law to encompass children in all grades of school did not include fiscal support, all efforts to bring Alabama's school-age children into compliance were hampered by vaccine shortages and lack of funds to purchase additional vaccines. During the year the Immunization Program requested and received emergency supplemental funds from both state and federal sources. Table 1 shows vaccine usage for the years 1971 through 1980. Nonetheless a few children were found to begin school with a temporary certificate, returning later in the fall to the health department to receive additional vaccines as available and to obtain the required blue certificate.

Although in its implementation the new compulsory school immunization law was hectic for public and private health care providers as well as for school officials, it rounded out efforts of the Immunization Program during the previous two years to ensure that Alabama's school-age children are adequately protected against vaccine-preventable diseases. A random check of school records conducted before the 1980 Christmas holidays indicated that over 90 percent of the students in most school systems were holding one of the State Health Department-approved certificates of immunization or exemption.

During 1980 the Immunization Program began a cooperative project with the Alabama Hospital Association to develop a hospital-based new mother education program. Still in developmental stages at the close of 1980, the project will encompass the following elements:

1. A three-fold pamphlet will be given to each new mother in every hospital in the state. The pamphlet will include a message from the State Health Officer, health department clinic times and sites, information about the seven vaccine-preventable diseases, the recommended immunization schedule and a standard immunization record card. The pamphlet will be more effective in communicating with parents and more cost-effective than the old systems of mailouts.

TABLE 1
VACCINE USAGE 1971-1980

Year	Diphtheria	Tetanus	Pertussis	Polio	Measles	Rubella	Mumps
1971	193,810	216,950	156,885	137,046	50,008	151,772	0
1972	184,391	202,647	150,147	150,778	55,347	61,403	0
1973	168,519	184,163	138,804	147,626	46,068	47,948	0
1974	212,358	224,409	180,735	210,328	59,597	62,252	0
1975	197,090	209,602	170,609	194,778	50,614	51,106	0
1976	183,982	196,174	154,401	173,260	43,299	43,535	0
1977	202,468	213,344	172,820	191,293	45,247	42,939	15,053
1978	321,452	333,889	164,901	336,955	125,833	64,322	219,676
1979	208,248	208,248	155,379	160,466	79,862	61,844	96,263
1980	356,499	356,499	175,325	311,826	152,989	161,307	219,731

2. In-service training will be offered to obstetric nurses to refresh them on current immunization practices.
3. High-risk mothers (as identified by the State Immunization Program) will receive special counselling upon receipt of the pamphlets to make sure that they understand the need to have their children immunized and the availability of immunization services in the community. Following of these high-risk children will be done through the existing high-risk identification and follow-up system, supported by a special mailing from the Immunization Program.

The Immunization Program has leased (with the option to buy) two desk-top computers. During 1980 a data system was written to meet the needs of local health department immunization clinics. One computer was placed in the Autauga County Health Department. As a State Immunization Clerk began to put the existing immunization records on computer, a computer programmer was continually improving the data system. The second unit is housed in the Bureau of Health Data Systems.

The Immunization Program has adopted federal guidelines to eliminate indigenous measles by 1982. An existing statewide surveillance system (SOS), already sensitive to the occurrence of vaccine-preventable diseases in 42 counties and cities, was primarily focused toward rapid measles detection. During 1980 only 22 cases of measles were detected in the state.

The Immunization Program conducts three annual surveys to monitor immunization levels statewide: the school entrance survey, the two-year-old survey and the licensed day care center survey. The 1980-81 school entrance survey indicated that 98.03 percent of children beginning school in kindergarten or first grade are up to date on their immunizations and have a blue "Certificate of Immunization" on file in their school. This is an improvement over last year's 96.87 percent. Complete results of the school survey may be found in Table 2.

Annually, the Immunization Program conducts a random survey of two-year-old immunization levels. For the survey completed in December 1980, 71.9 percent of the two-year-olds surveyed were totally protected against measles, mumps, rubella, diphtheria, pertussis, tetanus and polio. This survey reveals an improvement over last year's 67.5 percent results. (Table 3 details the complete results.)

TABLE 2
IMMUNIZATION PROGRAM
SCHOOL ENTRANCE IMMUNIZATION SURVEY

	1980-81				(For Comparison) 1979-80	
County	Enrollment	# with IMM-50*	% with IMM-50*	Ranking	% with IMM-50*	Ranking
Autauga	912	899	98.57	30	97.61	37
Baldwin	2,264	2,241	98.98	19	99.45	9
Barbour	568	567	99.82	7	99.37	10
Bibb	553	546	98.73	23	98.21	27
Blount	989	982	99.29	13	97.14	42
Bullock	406	392	96.55	57	99.59	8
Butler	860	852	99.07	17	98.69	25
Calhoun	2,718	2,679	98.57	30	96.04	53
Chambers	1,672	1,599	95.63	59	97.57	38
Cherokee	1,113	1,081	97.12	53	94.92	60
Chilton	832	832	100.00	1	100.00	1
Choctaw	659	658	99.85	6	100.00	1
Clarke	1,157	1,127	97.41	52	97.89	34
Clay	527	517	98.10	46	96.83	46
Cleburne	398	398	100.00	1	98.88	21
Coffee	1,458	1,456	99.86	5	99.73	6
Colbert	1,667	1,505	90.28	67	95.99	54
Conecuh	517	491	94.97	62	94.89	61
Coosa	316	310	98.10	46	99.35	11
Covington	1,205	1,181	98.01	48	98.81	22
Crenshaw	330	324	98.18	42	99.01	18
Cullman	1,887	1,832	97.09	54	97.09	44
Dale	1,749	1,665	95.20	61	98.12	30
Dallas	2,550	2,410	94.51	63	98.04	31
DeKalb	1,152	1,080	93.75	64	88.47	67
Elmore	1,168	1,146	98.12	45	92.96	64
Escambia	1,471	1,427	97.01	55	95.95	56
Etowah	3,359	3,316	98.72	24	96.36	51
Fayette	525	523	99.62	8	99.81	5
Franklin	685	677	98.83	21	99.32	12
Geneva	565	561	99.29	13	99.71	7
Greene	642	631	98.29	40	96.64	47
Hale	600	600	100.00	1	100.00	1
Henry	692	682	98.55	33	98.03	32
Houston	2,620	2,585	98.66	28	98.95	19
Jackson	1,764	1,744	98.87	20	97.57	38
Jefferson	20,088	19,830	98.72	24	95.02	58
Lamar	574	574	100.00	1	97.47	41
Lauderdale	1,966	1,935	98.42	37	96.62	48
Lawrence	1,044	961	92.05	66	95.14	57
Lee	2,349	2,308	98.25	41	94.94	59
Limestone	1,437	1,404	97.70	50	97.98	33
Lowndes	451	440	97.56	51	94.89	61
Macon	1,054	1,039	98.58	29	96.41	50
Madison	5,377	5,300	98.57	30	98.14	28
Marengo	910	902	99.12	16	100.00	1
Marion	928	914	98.49	35	98.76	23
Marshall	1,830	1,699	92.84	65	98.92	20
Mobile	14,151	13,938	98.49	34	98.52	26
Monroe	979	961	98.16	43	95.98	55
Montgomery	7,749	7,588	97.92	49	96.23	52
Morgan	2,497	2,459	98.48	36	93.94	63
Perry	501	495	98.80	22	99.23	14
Pickens	718	714	99.44	11	99.30	13
Pike	1,049	1,000	95.33	60	91.35	65
Randolph	634	631	99.53	9	98.13	29
Russell	1,701	1,689	99.29	13	98.71	24
St. Clair	1,287	1,270	98.68	27	97.76	35
Shelby	1,627	1,601	98.40	39	97.05	45
Sumter	464	458	98.71	26	96.62	48
Talladega	1,835	1,806	98.42	37	90.20	66
Tallapoosa	1,585	1,576	99.43	12	97.48	40
Tuscaloosa	4,321	4,240	98.13	44	97.68	36
Walker	1,914	1,904	99.48	10	99.02	17
Washington	666	642	96.40	58	99.23	14
Wilcox	625	604	96.64	56	99.22	16
Winston	616	610	99.03	18	97.14	42
State Total	125,477	123,008	98.03	--	96.87	--

*IMM-50—Certificate of Immunization (At least 3 DTP injections, 3 polio doses, 1 measles, 1 rubella, and 1 mumps)

TABLE 3
IMMUNIZATION PROGRAM
TWO-YEAR-OLD IMMUNIZATION LEVELS—1980-1981

	% Immunized for:					% Totally Protected	(For Comparison) 1979 - 80 % Totally Protected
	DTP[1]	Polio[2]	Measles[3]	Rubella[3]	Mumps[3]		
HSA 1 (Colbert, Cullman, Franklin, Jackson, Lauderdale, Lawrence, Limestone, Madison, Marion, Marshall, Morgan, & Winston Cos.)	93.9	84.3	93.9	92.2	89.6	79.1	71.8
Tri-County Health Dist.* (Cullman, Lawrence, Limestone, Morgan Cos.)	90.2	75.4	87.7	88.5	85.2	71.3	69.8
Northwest Al. Health Dist.* (Colbert, Franklin & Lauderdale Counties)	92.7	74.0	86.5	85.4	81.3	66.7	68.5
Madison County*	98.1	97.1	100.0	97.1	93.3	91.4	77.6
HSA 2 (Bibb, Fayette, Greene Hale, Lamar, Pickens, & Tuscaloosa Counties)	84.7	75.0	78.5	77.8	75.7	66.0	61.6
Tuscaloosa County*	89.9	74.6	81.9	81.9	81.9	70.3	60.9
HSA 3 (Blount, Chilton, Jefferson, St. Clair, Shelby & Walker Cos.)	90.9	79.3	95.0	92.6	91.7	76.0	73.5
Jefferson County*	94.2	81.8	95.9	94.2	94.2	80.2	72.7
HSA 4 (Calhoun, Chambers, Cherokee, Clay, Cleburne, Coosa, DeKalb, Etowah, Randolph, Talladega, & Tallapoosa Cos.)	90.3	71.8	87.1	85.5	83.9	66.9	60.6
HSA 5 (Autauga, Barbour, Bullock, Butler, Coffee, Covington, Crenshaw, Dale, Elmore, Geneva, Henry, Houston, Lee, Lowndes, Macon, Montgomery, Pike & Russell Cos.)	91.1	78.9	88.6	88.6	87.8	74.8	62.3
Montgomery County*	80.3	67.4	80.3	81.1	80.3	63.6	52.8
HSA 6 (Baldwin, Choctaw, Clarke, Conecuh, Dallas, Escambia, Marengo, Mobile, Monroe, Perry, Sumter, Washington, & Wilcox Counties)	85.7	72.3	84.0	84.0	82.4	63.9	68.2
Mobile County*	88.8	77.6	90.3	90.3	89.6	75.4	66.7
STATE - 1980 - 81	89.7	77.5	89.2	88.0	86.6	71.9	
(For Comparison) - 1979 - 80	84.3	74.7	81.9	80.3	79.1	67.5	

1 - 3 or more injections
2 - 3 or more doses
3 - 1 injection
4 - 3 DTP, 3 Polio, 1 Measles, 1 Rubella, 1 Mumps

*Separate surveys were conducted in these metropolitan areas.

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*Separate surveys were conducted in these metropolitan areas.
[1] 3 or more injections
[2] 3 or more doses
[3] 1 injection
[4] 3 DTP, 3 Polio, 1 Measles, 1 Rubella, 1 Mumps

The 1980 random survey of immunization levels among ildren in licensed day care centers showed the following atewide results: DTP, 95.2 percent; polio, 93.0 percent; easles, 95.2 percent; rubella, 95.1 percent; mumps, 94.5 ercent. Table 4 shows a complete breakdown of survey esults by HSA. It is interesting to note that an assessment f every licensed day care center, conducted in 1980 in ooperation with the Department of Pensions and Security, hows that 90.5 percent of the children under age two and 2.2 percent of those aged two through five are adequately nmunized. These results are very close to those compiled om the random survey, validating credibility of the survey s a measuring device.

TABLE 4
1980 DAY CARE CENTER ENROLLEES
PERCENT IMMUNIZED

	DTP	Polio	Measles	Rubella	Mumps
SA 1	95.9	94.0	95.6	95.1	95.1
SA 2	97.5	97.0	97.9	97.9	97.9
SA 3	98.5	94.1	98.5	98.4	98.4
SA 4	96.1	95.0	97.8	97.3	96.1
SA 5	90.9	90.0	90.7	90.7	90.5
SA 6	95.3	90.9	94.1	94.7	92.5
tate	95.2	93.0	95.2	95.1	94.5

In 1980, as in the previous year, the North Alabama mmunization Steering Committee (composed of epresentatives of public health, health systems agencies, rivate medicine, education, consumerism) was helpful to he State Immunization Program. Members drafted letters o various government officials explaining the mmunization Program's problem with lack of funds for urchase of vaccines to enforce the school law. It is felt that heir efforts were most productive in the eventual allocation of funds for the emergency purchase of vaccines mentioned earlier in this report.

INFLUENZA PROGRAM—The Alabama Influenza mmunization Program continues to enjoy increasing success. Since its inception three years ago, the program as made possible the administration of more than 81,000 doses of influenza vaccine to Alabama's high-risk population.

During the 1980-81 flu season, vaccine was administered by 64 of the state's 67 county health departments. Vaccine was made available to private providers such as hospitals, nursing homes and private physicians in all of the state's counties. Statewide more than 300 private providers received influenza vaccine through this program.

The surveillance of influenza-like illness continued to be an integral part of the program during 1980-81. In addition to the Immunization Division's SOS system, the Influenza Program maintains an active surveillance network consisting of 45 reporting sites. These sites are contacted on a weekly basis from September through April in order to monitor the extent of influenza activity within the state.

Personnel of the Influenza Immunization Program are versed in outbreak control techniques for vaccine-preventable diseases. During the past year program personnel have assisted the Division of Immunization, Division of Epidemiology and the Centers for Disease Control in disease outbreaks and epidemiological studies.

Tuberculosis Control Division

There were 663 new cases of tuberculosis reported in Alabama during 1980. The total cases reported represent an approximate 3 percent increase compared to the 644 cases during 1979. New tuberculosis case rates per 100,000 population in the state increased from 17.0 in 1979 to 17.3 in 1980. Reactivation cases represented approximately 4 percent of the total cases reported in 1980.

There were 64 extrapulmonary cases reported during 1980 which is exactly the same number as reported the previous year. Extrapulmonary cases represented 10 percent of the total cases reported.

Tuberculosis continued to be a major public health problem in the state. Based on the latest information available from the Centers for Disease Control in Atlanta, Alabama ranked 9th in the nation in new tuberculosis case rates.

Relative to race the total number of new cases reported is about evenly divided between black and white. However case rates per 100,000 population for blacks continued to be at least three times greater than that for the white population, 38.1 and 10.3 respectively. Although blacks account for only 25 percent of the state's population, they represent over half of the new tuberculosis cases reported in 1980. As in the past males continued to comprise approximately two-thirds of the total new tuberculosis cases reported. Persons 45 years of age and older continue to represent approximately 70 percent of the cases reported during the year. Case rates in 1980 by race and sex per 100,000 population are as follows: black male, 56.3; black female, 22.1; white male, 15.0; white female, 5.9.

Case rates per 100,000 population ranged from highs of 32.9, 31.9, 28.7 and 28.2 in Bibb, Cherokee, Dallas and Tuscaloosa counties respectively to no cases being reported in Choctaw, Cleburne and Henry counties. Jefferson County reported an increase of 7 percent in 1980 compared to the previous year. It, with nearly 20 percent of the state's population, reported almost one-fourth of the state's new cases in 1980. New case rates by public health areas are as follows: PHA No. 1, 16.4; PHA No. 2, 24.2; PHA No. 3, 21.1; PHA No. 4, 17.1; PHA No. 5, 13.7; and PHA No. 6, 17.3.

In September 1980 an outbreak of tuberculosis was reported in Houston County in Southeast Alabama. Within a four-year period from 1976 through 1980, thirteen cases of tuberculosis have been reported from an eight city block area of Northeast Dothan. In addition 51 persons in the area have been found to be infected and are at high risk of developing active tuberculosis. The outbreak consisted of seven cases in one family and six additional cases related to the family through close association. The cases ranged in age from three months to 64 years and included one 17-month-old child who died from TB meningitis. The average age of the cases reported in the outbreak was 29 years which is considerably less than the state average. Special skin test, X-ray and drug clinics have been held in the area and additional clinics are planned for the coming months. It is not known at this time if all the tuberculosis cases from this community have been identified or if the chain of transmission has been interrupted.

At the end of the calendar year, prevalence reports indicated that there were approximately 1,500 diagnosed cases and atypicals listed as receiving medical supervision by county health departments and contract hospitals. By adhering to the contract hospital admission guidelines, the program was able to manage entirely on an outpatient basis approximately half of the new cases reported. All cases completing the prescribed multiple drug therapy continue to be recommended for closing to medical supervision. Although private physicians and hospitals are involved in the initial diagnosis and reporting of approximately two-thirds of the new cases, most of the patients are subsequently referred to the county health department clinics for long-term treatment as well as contact identification, investigation and preventive treatment. Consequently nearly 95 percent of the known cases, contacts and suspects in the state receive their medical supervision through the county health department clinics and contract hospitals. With the continued shift of emphasis from inpatient to outpatient care, coupled with supervised therapy, the burden is much greater on the county health department outpatient treatment program. On the average tuberculosis information indicates that 98 percent of the tuberculosis patient's total treatment is received on an outpatient basis compared to only 2 percent in the hospital.

Patients who have been discharged from medical supervision are recommended for no further follow-up unless they subsequently develop symptoms. Close contacts and other high-risk groups who have completed INH preventive therapy are also recommended for discharge from surveillance and medical supervision. Reactivation rates are extremely low among persons completing treatment, making it unproductive from a cost benefit standpoint to have them return to clinics for periodic follow-up. Program evaluation reports for 1980 indicate that 96 percent of the new TB cases completed 12 months of therapy. Current records also indicate that 98 percent of all identified contacts received appropriate examinations, and 83 percent of the close contacts completed a recommended course of preventive therapy.

County health departments reported 154,957 tuberculin tests performed in 1980. Of this total 84 percent were read, with 5,675 having results 10mm or greater for an overall reactor rate of 4.38 percent. Positive skin test rates ranged from a low of .5 percent (5 per 1,000) among persons (including contacts) who were infants through four years of age to 12 percent (120 per 1,000) for persons 65 years of age or older. Positive tuberculin reactor rates among blacks continued to be twice as great when compared to whites. When applying Alabama's tuberculin positive skin test rates by age group and race to the total population in the state, the infected population numbers nearly 218,350 individuals. The estimated number of infected persons ranges from a low of nearly 9,000 in persons under 14 years of age to a high of 71,827 for persons in the 45 through 64 year old age bracket.

As in the past school employees are the only individuals required by law to have an annual examination for tuberculosis. In an effort to improve this phase of the tuberculosis program, a committee was appointed to study the school employee program and the existing law. The committee was charged with the responsibility of studying existing data on school employee examinations for tuberculosis and for making new recommendations in this regard. New recommendations were developed by the area tuberculosis physician coordinators and were presented to the State Committee of Public Health in 1980. The State Committee of Public Health, in concurrence with the county and district health officers, approved the new recommendations in 1980. The basic change in the policy for examination of school employees would require an examination initially for teachers, bus drivers, janitors, food handlers and others who are in contact with children. No subsequent examinations would be required unless it was deemed necessary by the county health officers, State Health Officer and/or the Tuberculosis Control Program. The Tuberculosis Control Division is hopeful that the new recommendations can be implemented in 1981. This new policy change will result in a more cost-effective program with regard to the examination of school employees for tuberculosis.

The State Tuberculosis Program continued to stress that low priority be placed on the examination for tuberculosis of food handlers and similar groups in connection with job requirements. Most of the county health departments involved in this activity have been performing the work primarily as a result of tradition rather than local ordinances, regulations and productiveness in finding new cases. The TB Control Program continued to recommend that these examinations be discontinued.

The Tuberculosis Control Division continued contracts with seven general hospitals for the care of inpatients during 1980. The contract hospitals recorded 364 patient admissions and discharges and 6,510 patient days during the year. The average hospital patient stay was reduced from 18.6 days in 1979 to 17.9 in 1980. The average contract hospital cost was approximately $195 per patient day in 1980. The state tuberculosis budget cost was approximately $100 per patient day with third party insurance paying the difference. The average cost per patient hospitalized in 1980 was approximately $3,581.

The contract for recalcitrant patients was renegotiated with the Board of Corrections in 1980. The contract provides for one bed as needed for male patients at Kilby Correctional Facility and one bed at the Julia Tutwiler Facility for females. The court order program is only utilized for the extremely difficult, non-motivated and non-complying tuberculosis patient. The Board of Corrections' bed is used as a last resort when it is determined by the court that the patient is infectious and a definite public health hazard to his family and community. The patient is kept for a minimum of six weeks, and failure to report to the county health department outpatient clinic as recommended after discharge will result in the patient being rehospitalized at the corrections facility. Patients admitted under the recalcitrant program remain under court order until completion of 12-18 months of multiple drug therapy. The contract serves primarily as a deterrent as only four patients were admitted under the court order program during the year. The four patients had a cumulative total of 204 days with an average stay of 51 days.

The contract hospital program cost the state $700,000 in 1980 compared to nearly $5,000,000 in 1967 when the district tuberculosis hospitals were in existence. This is a tremendous savings to the state of over $4,000,000 per year. It is even more remarkable when the inflationary trends are considered.

The preventive therapy program continued with increased emphasis placed on close contacts and other persons at high risk of developing tuberculosis. During 1980, 4,576 persons were placed on isoniazid preventive therapy bringing the total to 115,344 started on the program since 1965. The preventive therapy program has been extremely effective in Alabama, and it is believed that this activity has been a major factor in the reduction of new cases and case rates in recent years.

The area tuberculosis physician coordinator concept was continued in 1980. There are 10 such consultant physicians who are responsible for coordinating inpatient and outpatient activities in all 67 counties of the state. In addition to the coordinators, there are 20 other physicians who hold county health department outpatient clinics on a fee-for-service basis.

The Tuberculosis Control Division and the State Tuberculosis Laboratory continue to participate in a primary drug resistance study with the Centers for Disease Control in Atlanta. The study began in November 1976; thus far a total of 1,038 cultures has been submitted to the Centers for Disease Control. Results of the study indicate that approximately 4.0 percent of the specimens submitted from Alabama had some form of primary drug resistance to the anti-tuberculosis drugs. The average primary drug resistance rate for the 18 areas participating in the study is approximately 10 percent. Alabama's drug resistance percentage of 4.0 percent ranks it among the lowest of all areas participating in the study. The Alabama Tuberculosis Program continued its system of monitoring drug resistance by county and statewide. The system enabled the TB program to detect emerging drug resistant patterns as they occur.

Approximately 100 nurses, physicians and other interested individuals attended the Twelfth Annual Tuberculosis Conference in Mobile. The conference was held in conjunction with the Alabama Public Health Association. Both the general and clinical sessions were planned by the Tuberculosis Control Division. The conference was approved for continuing medical education credit. In addition numerous in-service tuberculosis programs were conducted at hospitals, health departments, lung associations and other facilities by the Tuberculosis Control Division office and field staff. The annual conference, in-service programs and other scheduled workshops provided persons attending with the latest information available concerning the modern management of tuberculosis.

ACTIVITIES OF THE TB PROGRAM NURSES—The tuberculosis program nurses continued to assist the county health departments in their tuberculosis work, serving as coordinators of the tuberculosis program in the county health departments. They also served as local consultants in tuberculosis to private physicians, hospitals and other agencies.

The tuberculosis program nurses made 2,732 visits to the county health departments directly related to priority tuberculosis control activities. They provided nursing services in a total of 739 TB outpatient and regular chest clinics.

The nurses collected 7,390 sputum specimens by the aerosol induction technique and administered 30,298 Mantoux tuberculin skin tests.

A total of 1,834 home visits was made to tuberculosis patients and their families, and 1,017 other visits were made to nursing homes, schools, industries and private physicians in relation to tuberculosis control activities.

The program nurses conducted a total of 49 in-service education programs with 679 persons attending. They participated in the annual Tuberculosis Conference held in Mobile and in the Tuberculosis Workshop held in Birmingham in conjunction with the American Lung Association.

During the year three new nurses joined the staff, thus filling the vacant nursing positions within the program.

ACTIVITIES OF THE FIELD REPRESENTATIVES—The priorities for field investigators are cases at home, contacts to new cases, suspects and high-risk tuberculin reactors.

During 1980, 7,020 cases, contacts, suspects and reactors were recommended for being returned to medical supervision by the investigators. Field representatives were unable to locate only 45 or 6 percent of them.

The following types of referrals were dispositioned:

3,235 cases
1,332 contacts to new cases
413 suspects
2,040 reactors

The representatives visited 186 private physicians to obtain current X-ray, sputum and treatment status on delinquent patients. A total of 273 hospital visits was made related to tuberculosis control activities. Representatives attended 948 county health department chest and outpatient clinics. They also assisted in 208 special X-ray and tuberculin testing surveys throughout the state. A total of 2,473 aerosol sputums was collected.

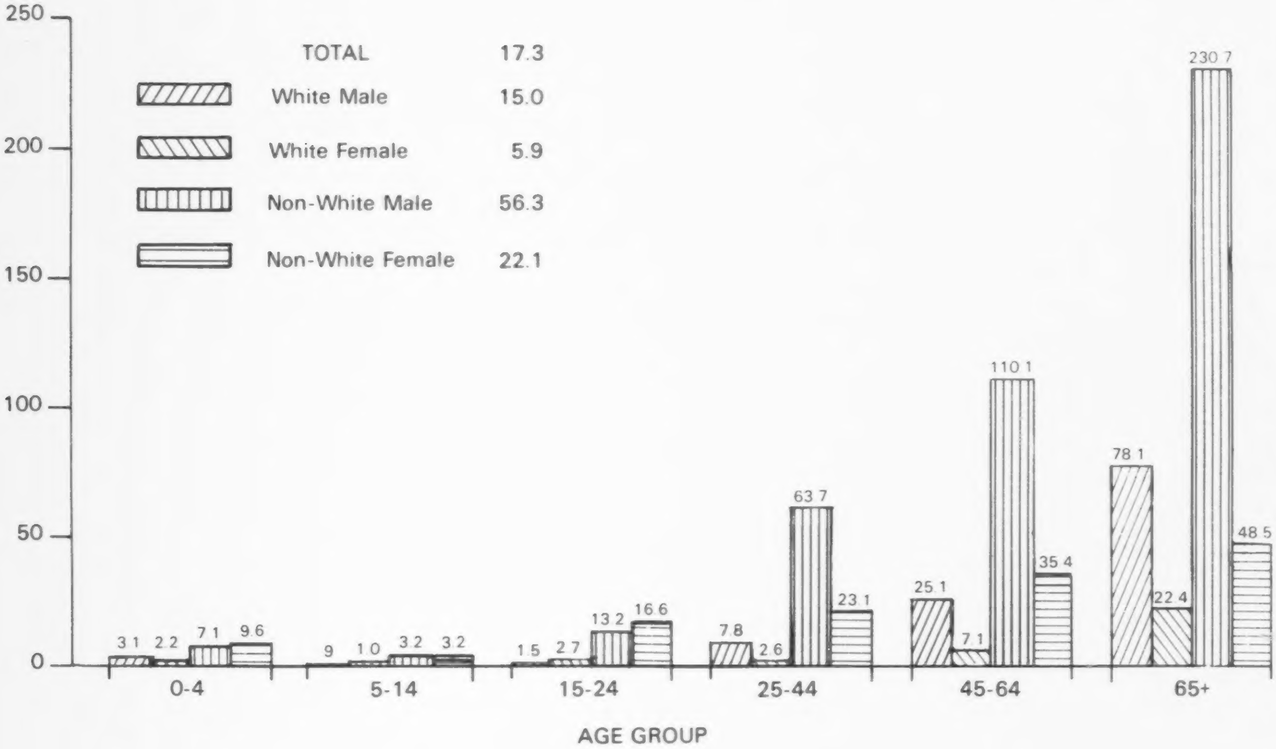
There were 30,943 mantoux tuberculin tests administered; 30,072 by the Ped-O-Jet technique and 871 with the syringe.

ACTIVITIES OF THE X-RAY TECHNICIANS—During 1980 the X-ray technicians assisted in 37 tuberculin skin testing programs and administered 17,114 tuberculin tests. They held 896 regular and outpatient clinics at the county health departments and performed 18,188 X-ray examinations.

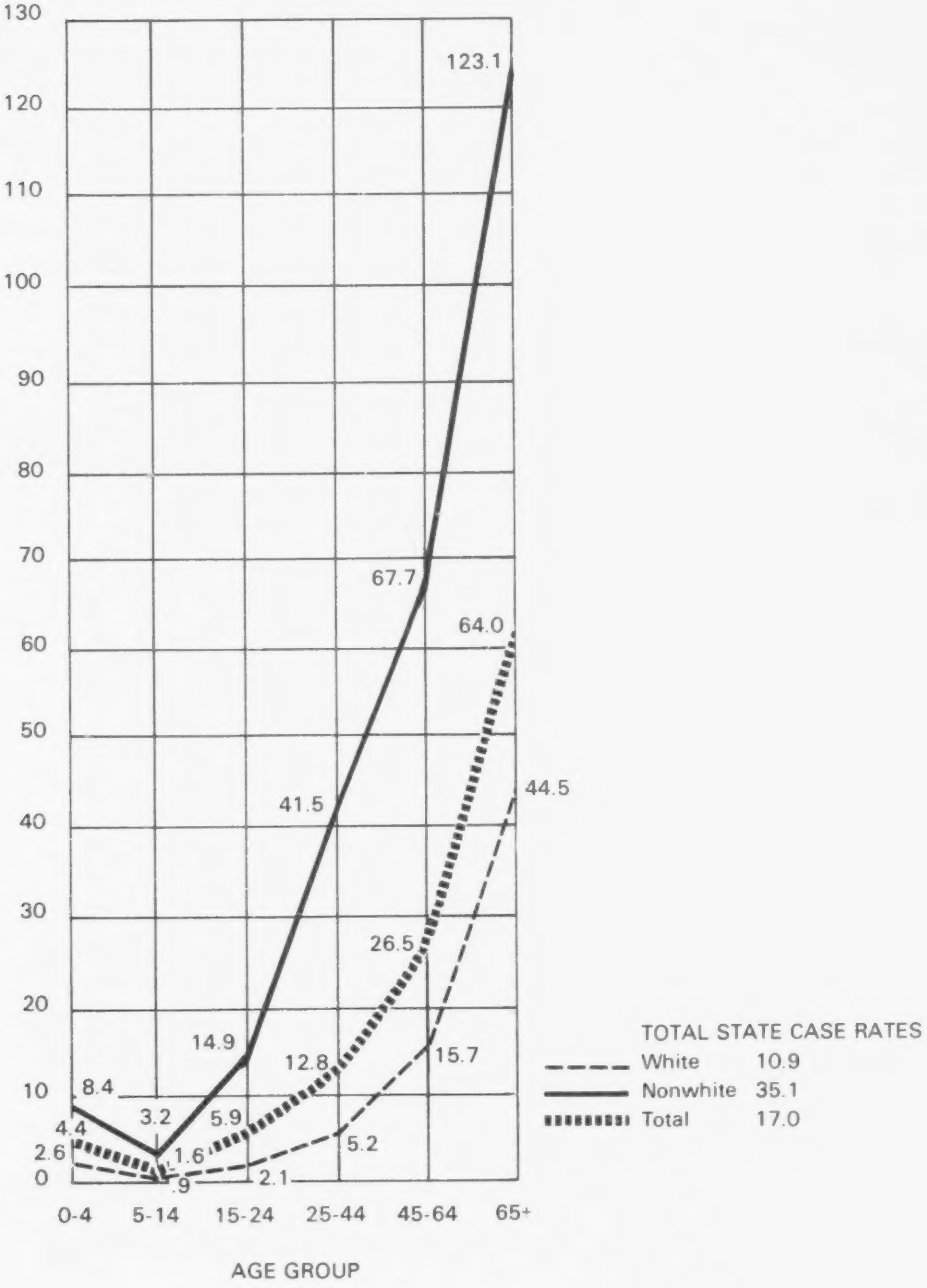
The X-ray technicians are also responsible for maintaining all the X-ray film files and for maintenance of all skin testing equipment. The chief X-ray technician is responsible for the maintenance of all X-ray and sputum induction equipment on a statewide basis.

Also during 1980 the X-ray technicians began a program of cross-training with the tuberculosis field representatives. As a result of this program, the technicians will be trained to make field visits to patients who are deliquent on drugs, X-rays or sputum examinations or to assist in other tuberculosis control activities wherever needed when they are not involved in X-ray clinics or skin testing programs.

NEW TUBERCULOSIS CASE RATE PER 100,000 POPULATION BY AGE GROUP, RACE & SEX—1980
TOTAL—663



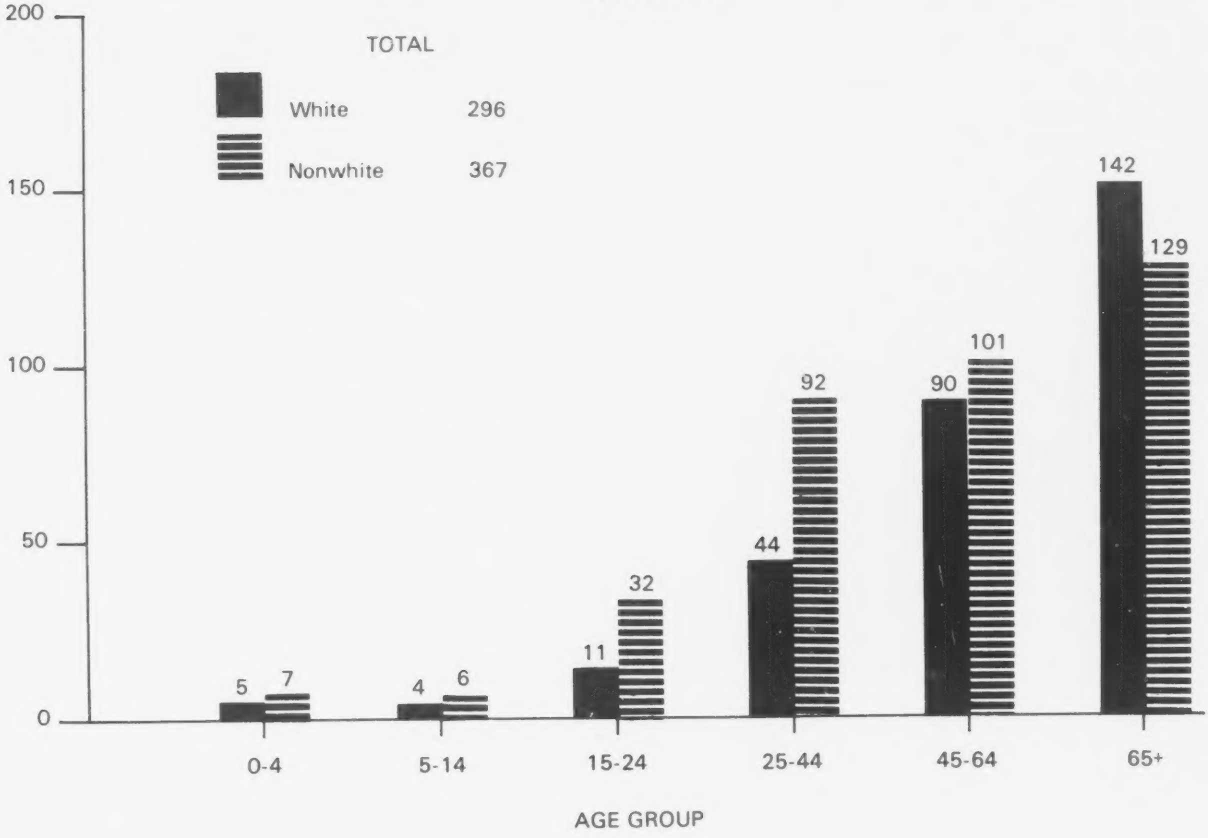
NEW TUBERCULOSIS CASE RATES PER 100,000 POPULATION BY AGE GROUP & RACE 1980



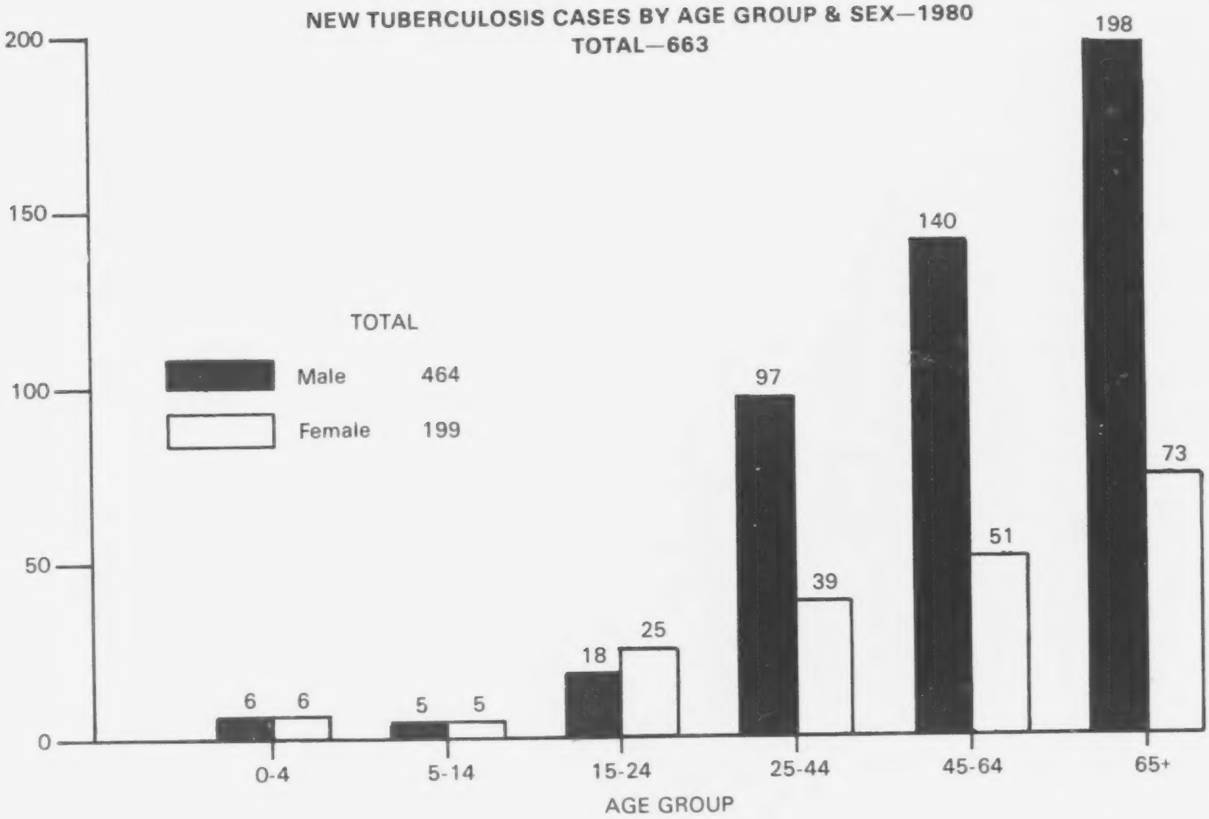
NEW TB CASES REPORTED IN 1980 BY SOURCE OF ORIGINAL REPORT

	No. Cases	% of Total Reported
Penal & Mental Institutions	8	1.2
General Hospitals	216	32.6
Veterans' Hospitals	32	4.8
County Health Departments	270	40.7
Out-of-State Health Departs.	1	.2
Private Physicians	129	19.4
Death Certificates (or same day as death)	4	.6
Military	2	.3
All Other Sources	1	.2
GRAND TOTAL	663	100.0

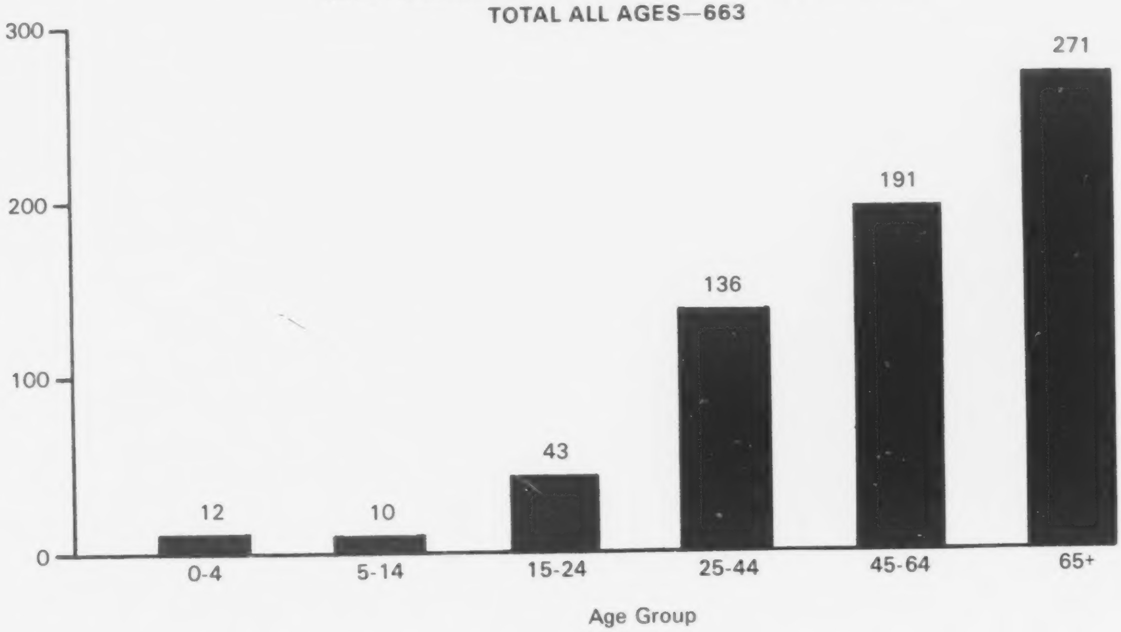
NEW TUBERCULOSIS CASES BY AGE GROUP & RACE—1980
TOTAL—663



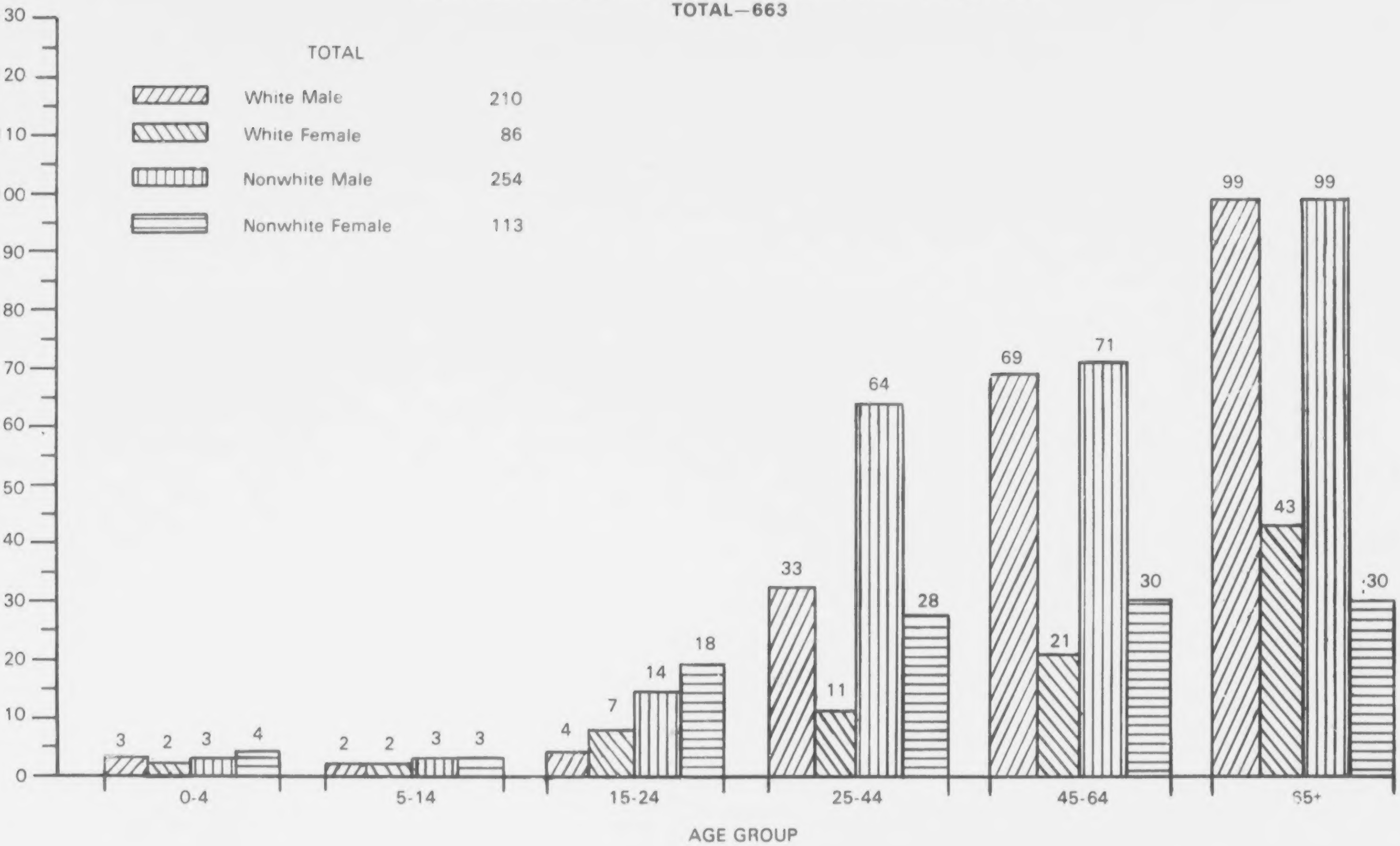
NEW TUBERCULOSIS CASES BY AGE GROUP & SEX—1980
TOTAL—663



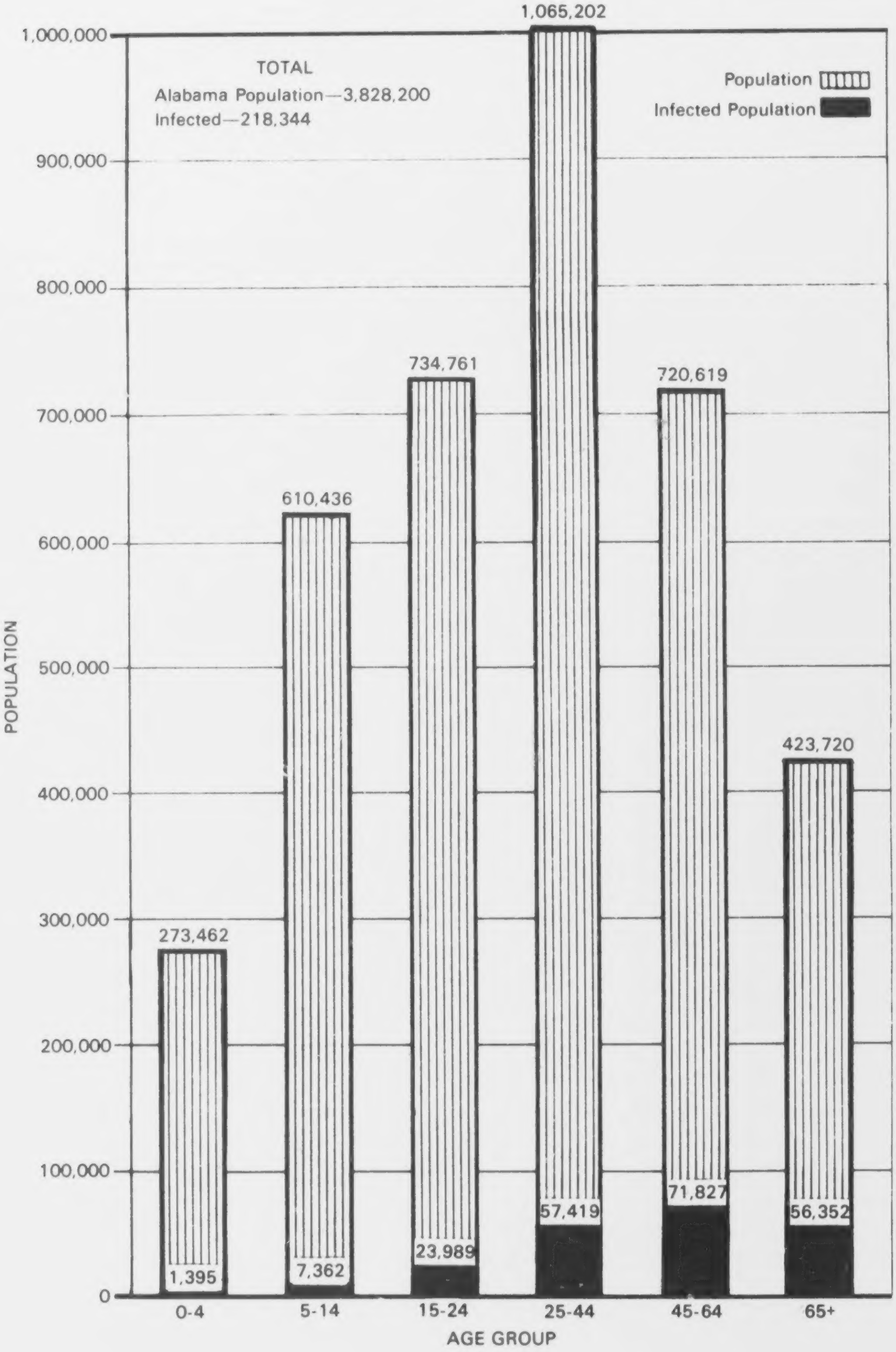
ALABAMA
NEW TUBERCULOSIS CASES BY AGE GROUP—1980
TOTAL ALL AGES—663



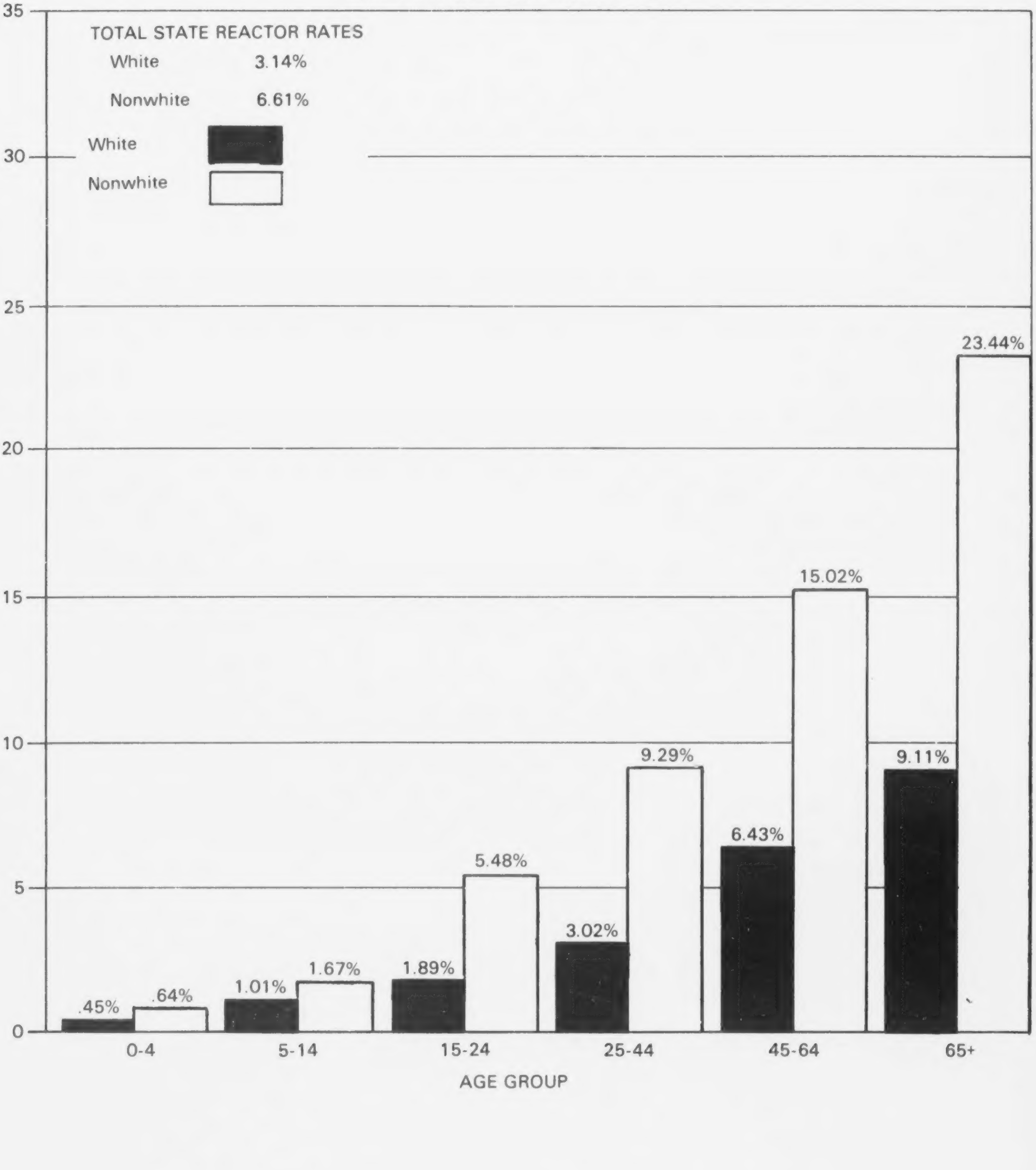
NEW TUBERCULOSIS CASES BY AGE GROUP, RACE & SEX—1980
TOTAL—663



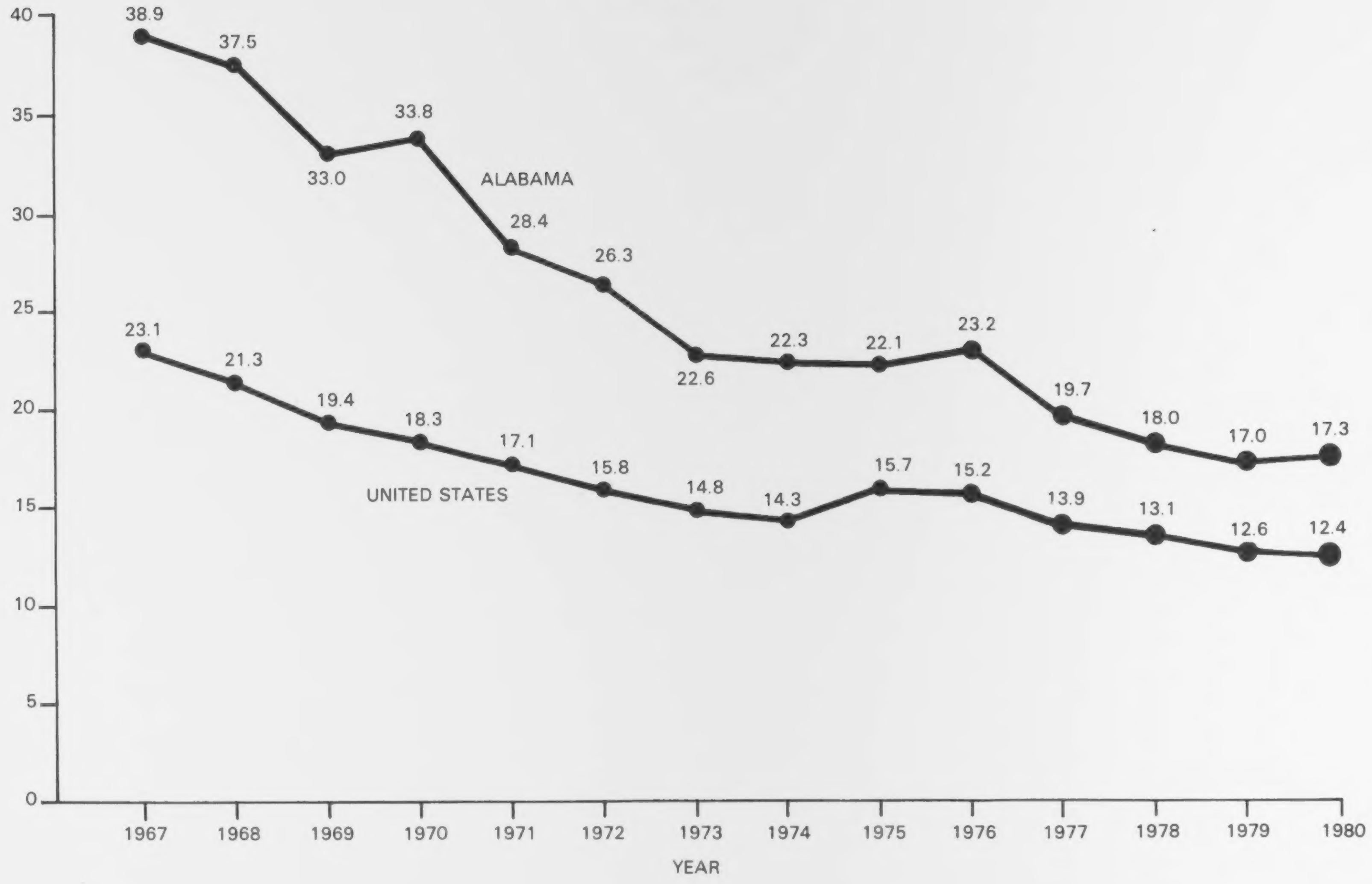
TOTAL POPULATION AND PERSONS INFECTED WITH TUBERCLE BACILLI BY AGE GROUP—1980



TUBERCULIN POSITIVE REACTOR RATE BY AGE GROUP AND RACE—1980



ALABAMA AND UNITED STATES
TB CASE RATES
PER 100,000 POPULATION
1967-1980



HOSPITAL PATIENT ADMISSIONS AND DISCHARGES
1970-1980

Year	1970	1971	1972	1973*	1974	1975	1976	1977	1978	1979	1980
Total Admissions	1,126	1,134	1,016	745	668	557	459	473	470	358	364
Total Discharges	1,103	1,273	1,095	1,016	738	547	512	465	482	357	364

*Beginning of General Hospital Contract Program

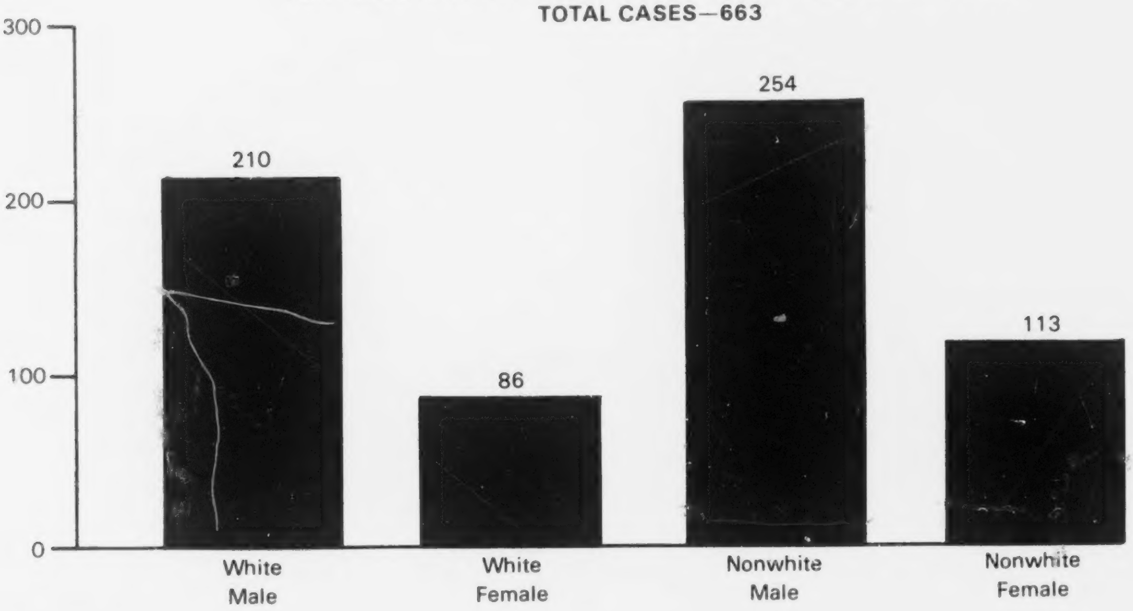
ALABAMA TUBERCULOSIS CONTROL DIVISION
PULMONARY & EXTRAPULMONARY CASES
1965-1980

Year	Pulmonary Cases	Extrapulmonary Cases	Total TB Cases Reported
1965	1,374	43	1,417
1966	1,162	52	1,214
1967	1,322	57	1,379
1968	1,281	57	1,338
1969	1,129	74	1,203
1970	1,111	55	1,166
1971	909	76	985
1972	859	59	918
1973	735	55	790
1974	721	64	785
1975	719	61	780
1976	760	64	824
1977	634	70	704
1978	601	71	672
1979	580	64	644
1980	599	64	663
TOTAL	14,496	986	15,482

NEW TUBERCULOSIS CASES BY RACE AND SEX
1960-1980

		White			Nonwhite		
Year	Total	Total	Male	Female	Total	Male	Female
1960	1,400	814	515	299	586	347	239
1961	1,357	718	478	240	639	369	270
1962	1,266	698	479	219	568	336	232
1963	1,326	716	478	238	610	385	225
1964	1,259	691	446	245	568	349	219
1965	1,417	748	525	223	669	413	256
1966	1,214	565	398	167	649	387	262
1967	1,379	618	423	195	761	463	298
1968	1,338	599	410	189	739	455	284
1969	1,203	508	353	155	695	421	274
1970	1,166	543	383	160	623	400	223
1971	985	455	319	136	530	321	209
1972	918	459	310	149	459	320	139
1973	790	361	244	117	429	288	141
1974	785	351	239	112	434	293	141
1975	780	354	237	117	426	289	137
1976	824	392	280	112	432	292	140
1977	704	314	214	100	390	269	121
1978	672	317	229	88	355	236	119
1979	644	308	204	104	336	220	116
1980	663	296	210	86	367	254	113

ALABAMA
NEW TUBERCULOSIS CASES REPORTED BY RACE & SEX—1980
TOTAL CASES—663



TUBERCULOSIS DIVISION
CONTRACT HOSPITAL INFORMATION
1980

Hospital	Admissions	Discharges	Patient Days	Average Pt. Stay
Cooper Green Hospital Birmingham, Alabama	84	84	1,260	15.0 days
Druid City Hospital Tuscaloosa, Alabama	84	84	1,526	18.2 days
Eliza Coffee Hospital Florence, Alabama	22	22	395	18.0 days
Lanier Mem. Hospital Langdale, Alabama	2	2	59	29.5 days
Mountain View Hosp. Gadsden, Alabama	94	94	1,994	21.2 days
St. Margaret's Hospital Montgomery, Alabama	27	27	504	18.7 days
Univ. of So. Alabama Medical Center Mobile, Alabama	51	51	772	15.1 days
TOTAL Contract Hospitals	364	364	6,510	17.9 days

CONTRACT HOSPITAL INFORMATION
OCTOBER 1, 1979 TO MARCH 31, 1980

Contract Hospital	Current Bed Allocation at $30 Per Day	Admissions	Discharges	Total Pat. Days	Average Patient Stay	Average Per Diem Cost	Total Hosp. Cost	Average Hosp. Cost Per Pat. Treated
Cooper Green Hospital Birmingham, Alabama	14	40	40	675	16.9	$244.39	$164,964.65	$4,124.12
Druid City Hospital Tuscaloosa, Alabama	12	61	61	1,158	19.0	224.12	259,534.15	4,254.66
Eliza Coffee Mem. Hosp. Florence, Alabama	2	12	12	205	17.1	210.80	43,213.85	3,601.15
Lanier Memorial Hosp. Langdale, Alabama	2	1	1	33	33.0	110.86	3,658.25	3,658.25
Mountain View Hospital Gadsden, Alabama	20	42	42	945	22.5	101.90	96,299.92	2,292.86
St. Margaret's Hospital Montgomery, Alabama	5	11	11	184	16.7	309.75	56,993.63	5,181.24
University of South Ala. Medical Center Mobile, Alabama	9	30	30	402	13.4	201.01	80,807.99	2,693.60
TOTALS	64	197	197	3,602	18.3	$195.86	$705,472.44	$3,581.08

ALABAMA TUBERCULOSIS CASES
CASE RATES
AND RANK IN THE U.S.

Year	Cases	Rate	Rank
1960	1,302	39.8	—
1961	1,313	39.5	10
1962	1,164	35.1	12
1963	1,326	39.3	7
1964	1,259	36.7	8
1965	1,417	40.6	3
1966	1,214	34.6	7
1967	1,379	38.9	3
1968	1,338	37.5	3
1969	1,203	33.0	3
1970	1,166	33.8	3
1971	985	28.4	3
1972	918	26.3	3
1973	790	22.6	5
1974	785	22.3	4
1975	780	22.1	7
1976	824	23.2	3
1977	704	19.7	9
1978	672	18.0	10
1979	644	17.0	9
1980	663	17.3	*

*Rank not available at this time

Division of Venereal Disease Control

During 1980 the medical facilities of Alabama reported 24,020 cases of gonorrhea for a 6 percent decrease from the previous year. It has been 17 years since Alabama has experienced such a significant decrease in gonorrhea. This achievement is the culmination of an all-out effort to bring gonorrhea under control. In 1972 a statewide gonorrhea culture screening program was launched to identify and to treat asymptomatic females. These were identified through the various medical facilities both public and private who provided services such as Family Planning and Cancer Detection.

Once these infections were identified and treated, the problem of reinfections increased considerably. A program of epidemiologic investigation was implemented to prevent these reinfections. It was found that many of the so-called asymptomatic females also had asymptomatic male sex partners. Program guidelines and priorities were rearranged to ensure that both male and female asymptomatic patients were identified and adequately treated.

A significant problem that has become more evident during the last few years is the increase in resistant strains of gonorrhea. An intensive test-of-cure program has been implemented to remove these strains from the infectious reservoir. All such patients are given high epidemiologic priority and are sought out along with their sex partners for treatment.

Another problem identified and solved during the past two or three years is that of gonococcal pelvic inflammatory disease (GPID). The division worked with and through the hospital emergency rooms (HER) and the VD clinics so that patients with GPID were given top priority. These were routinely referred from the HERs to local health depatments for evaluations, tests-of-cure and epidemiologic follow-up. In 1980, 529 cases of GPID were identified, treated and epidemiologically pursued. Many of these patients would have developed major medical complications, such as sterility or ectopic pregnancies. Some possibly could have died from various complications.

These program emphases which began in 1972 have not only halted the annual increases experienced for the past 17 years but have actually resulted in a decrease in gonorrhea morbidity. It is anticipated that the decrease experienced in 1980 will be even greater in 1981. (Attached charts, graphs and tables give additional information.)

In 1980 the various medical facilities of Alabama reported 478 civilian cases of primary/secondary syphilis and 307 cases of early latent syphilis. Compared to the previous year these represent increases of 58.8 percent and 27.9 percent respectively. Mobile, Montgomery and Birmingham accounted for most of the increase, while Tuscaloosa, Talladega, Pike, Lee and Russell counties experienced minor outbreaks. No one reason can be singled out as the primary cause for these increases. One significant factor however was obvious. The division's staff and other resources simply were inadequate to cope with the increased case-load.

Increasing incidences of early syphilis is a national trend which is being reflected in all of Alabama's adjoining states. Interstate travel certainly contributed to the spread of venereal disease and thus accounted for part of Alabama's increase in 1980. Alabama sent 449 epidemiologic reports to other states and received 235 from other states.

The case-finding staff was increased by nine new public health representatives during 1980 and hopefully as they gain experience they will contribute more and more to syphilis control in 1981. (Attached charts, graphs and tables provide additional information.)

The Laboratory Reactor Program continued to serve as the statewide syphilis screening program. A concentrated effort was put forth to ensure that all laboratories in the state reported in accordance to reporting procedures. At the present there are 161 private and public laboratories in the state. Approximately 85 percent of them report regularly. For one reason or another, 15 percent must be reminded or visited periodically to ensure their reporting. A total of 23,000 reactive serologic tests for syphilis was processed through this program during 1980.

Without this program the syphilis surveillance program could not function effectively.

Venereal disease education reached a very high level of efficiency during 1980. The major accomplishment was the inroads made in the introduction of VD education into the junior and senior high schools of the state. A VD curriculum guide was developed for school teachers and was made available to all schools in Alabama. To aid and promote its acceptance and use by school teachers, 30 workshops designed to instruct teachers in the methods of using the guide were conducted by the Venereal Disease information specialist. There were 446 teachers who participated in these summer workshops.

A well balanced and coordinated educational program designed to meet the needs of individuals, special groups and the general public was designed and implemented during the year.

ALABAMA 1980 NEW CASES PRIVATE PHYSICIANS, CLINICS–BY COUNTY, AGE GROUP, SEX AND RACE
ANNUAL REPORT FOR PRIMARY AND SECONDARY SYPHILIS

COUNTY	0 - 14				15 - 19				20 - 24				25 - 34				35 - 54				55 - Over				Not Stated				Total
	White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
AUTAUGA					1				3				4							1									9
BALDWIN											1	2				1													4
BARBOUR					1				1				1			1													4
BIBB																													
BLOUNT																													
BULLOCK																													
BUTLER								1			1								1										3
CALHOUN								1			4	1			3	4	1						1						15
CHAMBERS									1				1																2
CHEROKEE																													
CHILTON																			1	1									2
CHOCTAW											1																		1
CLARKE								1																					1
CLAY																													
CLEBURNE																													
COFFEE																													
COLBERT																													
CONECUH								1																					1
COOSA																													
COVINGTON													1																1
CRENSHAW								1			1									1									3
CULLMAN																													
DALE											1				1	1													3
DALLAS												1				1													2
DEKALB																													
ELMORE											1	1				2			2	1									7
ESCAMBIA											2	2			1	3			2										10
ETOWAH													1																1
FAYETTE																													
FRANKLIN																													
GENEVA																													
GREENE																													
HALE																				1									1
HENRY											1								1										2
HOUSTON							1		1		2				3														7
JACKSON																													
JEFFERSON					1	1	5	1	2		8	5	7		8	3	2	1	2	1									47
LAMAR																													
LAUDERDALE																													
LAWRENCE																			1										1
LEE							1	2			3		1		1														8
LIMESTONE															1														1
LOWNDES																1													1
MACON								2			1																		3
MADISON									1				1		1		1												4
MARENGO																													
MARION																													
MARSHALL							1						1																2
MOBILE			2	1	1	2	16	17	3	1	46	21	4	1	41	17	6		18	6			2	1					206
MONROE							1	1																					2
MONTGOMERY				1			8	2			13	8	4		9	2			6	5		1							59
MORGAN					1				1				1	1															4
PERRY																													
PICKENS							3								1														4
PIKE							4	1			1					1													7
RANDOLPH												1																	1
RUSSELL							2	1			2	1			5														11
ST. CLAIR																													
SHELBY																													
SUMTER																													
TALLADEGA				1			2	3		1	7	4			6	2			2										28
TALLAPOOSA											1																		1
TUSCALOOSA					1				1						3				1										6
WALKER																													
WASHINGTON								1				2																	3
WILCOX																													
WINSTON																													
Not Stated																													
State Total			2	3	6	3	44	36	14	2	97	49	27	2	84	39	10	1	37	17		1	3	1					478

VD29-6.76

ALABAMA 1980 NEW CASES PRIVATE PHYSICIANS, CLINICS—BY COUNTY, AGE GROUP, SEX AND RACE
ANNUAL REPORT FOR GONORRHEA

COUNTY	0 - 14				15 - 19				20 - 24				25 - 34				35 - 54				55 - Over				Not Stated				Total
	White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		White		Non White		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
AUTAUGA					2	2		14	3	1	1	16	2		1	12			1										55
BALDWIN		1	2		4	13	9	34	4	20	11	29	1	13	7	16	1	2	5	2									174
BARBOUR			2	3	2	2	8	30	2	2	16	34	2	2	9	15			2	5									136
BIBB				2	1	3	1	5			1	11	1		1	3				1									30
BLOUNT						3			4	2		1	6	2															18
BULLOCK						1	13	34		3	3	30	1	1	5	10			2	2									105
BUTLER				1	1		3	6	1		9	5	3		11	5			1										46
CALHOUN		2	1	2	13	30	30	58	12	30	45	53	8	12	21	21			2	1									341
CHAMBERS							36	22	9	8	17	11	5	4	9	4			2		1			1					129
CHEROKEE								1		2	1	1	1							1									7
CHILTON				1	1	14		9		10		17	1	4		4		1											62
CHOCTAW				1		1	1	11	1	3	4	17	1	2	3	6													51
CLARKE			1	1			3	5		3	1	4				2				1									21
CLAY								1				2				1		1		1									6
CLEBURNE						1																							1
COFFEE		1	1		1	2	8	22	7	5	31	18	4	4	8	9	1	1	4			1							128
COLBERT					3	12	6	19	10	25	25	35	7	19	14	14	1	4	2	1		1							198
CONECUH			1			4	3	13	2	3	9	17	1	2	8	7				2									72
COOSA					3			1	5				1																10
COVINGTON		2		2	7	4	6	7	8	2	8	9	6	4	3	7			1	1		1	1	1					80
CRENSHAW					2	1	8	17	1	4	15	10	1	1	8	11	1		4	2			1						87
CULLMAN		1			6	9		3	3	15		2	5	9	1	1													55
DALE					1	3	4	6	5	3	5	4	2		3	2				1				1					40
DALLAS	1	1	9	18	4	11	204	194	20	28	317	225	8	16	156	115	1	1	37	14									1380
DEKALB					2	4			2	8		1	3	4	1	3													28
ELMORE				4	3		5	28	3	5	10	17	1	1	4	9		1	1	2									94
ESCAMBIA			2	3		2	3	17		6	3	16		3	2	13			1	1			1						73
ETOWAH			3	1	2	13	20	16	13	13	17	15	13	6	16	7	1	1	2				1						160
FAYETTE						4		6			1	2		6	1	4													24
FRANKLIN					3	11	1	2	4	5		2	5	10		2	1	5											51
GENEVA						4		4	2	3	4	2			2					1									22
GREENE				2			28	37			6	22			6	15				3									119
HALE				1			8	28			11	33			7	17					1			1					107
HENRY					1			2		1	4	2			2	1													13
HOUSTON	1	1	6	1	21	25	68	79	26	31	83	70	11	17	55	28	3	1	14	7		2	2	1					553
JACKSON				1			2	1	5			1	1		1	1	1												14
JEFFERSON	4	5	10	41	62	218	511	957	191	291	1,079	1,345	198	163	929	682	33	16	137	65	3		10	6					6956
LAMAR						1		1		3		1			1														7
LAUDERDALE				4	12	24	11	31	16	38	15	22	10	19	7	14	1	8		2									234
LAWRENCE				1		5	1	11		5	2	7	2	1	1	2				1				1					40
LEE		1		1	5	10	31	33	16	8	41	30	1	6	29	15			5	3									235
LIMESTONE				1	3	12	6	29	11	11	13	33	2	2	9	6	1			1									140
LOWNDES			2	5	2		43	86	1	1	49	95			24	56			7	9			11	7					398
MACON				2		1	26	37			58	45			26	14			2	1			1						213
MADISON	1	2	2	6	33	72	85	103	97	80	194	85	75	23	99	51	11	6	18	3	1								1047
MARENGO				3		1	1	10			1	10				10				1	1								38
MARION					1	5	1	8	1	6	2		2	2	2			1			1								32
MARSHALL						3		4	4	2	1	5	2		2	1	1	1											26
MOBILE	1	6	11	34	33	99	304	482	111	129	568	587	93	80	413	259	27	19	71	16	1	1	2	2					3349
MONROE						1	2	16				7			2	2													30
MONTGOMERY	1		4	49	34	81	481	529	69	76	820	595	57	47	495	294	8	4	78	45		2	5	2					3776
MORGAN	1	1		2	20	22	10	39	18	32	19	31	15	12	17	6	4	2	2	2									255
PERRY								2				1								1									4
PICKENS		1		4		3	2	27		1	3	11			2	14			1										69
PIKE			1	4	4	5	13	34	4	2	27	29	1		12	11			2				1						150
RANDOLPH								4			9	5		1	2	3		1	1	1									27
RUSSELL				2	5	6	45	36	10	15	35	38	7	6	35	19	1	2	4										266
ST. CLAIR						2		1	1		2	1	4	1	1	1													14
SHELBY					2	13	3	22	3	6	7	12	6	3	4	6		1	1	1									90
SUMTER							12	13	1	3	51	21	1		29	10			2	3									146
TALLADEGA		1		3	3	10	12	42	7	12	13	45	9	8	15	5		2	3	1									191
TALLAPOOSA	1				11	1			8	1			3	3															28
TUSCALOOSA		2	4	23	13	41	142	261	34	42	243	264	27	23	146	165	2	6	28	25			1	1					1493
WALKER					2	21	1	18	7	12	4	14	4	11	1	11	1												107
WASHINGTON								3	1	2					1	1													8
WILCOX				6	1		21	35	1		25	26		1	10	22				2									150
WINSTON						4				1				6															11
Not Stated																													
State Total	11	28	62	235	329	840	2242	3606	764	1020	3939	4099	620	560	2679	2045	101	87	443	232	9	8	37	24					24,020

VD29–6-76

ALABAMA COUNTY MORBIDITY (MILITARY EXCLUDED) RATE PER 100,000 POPULATION

	Primary & Secondary Syphilis				Total Syphilis		Gonorrhea			
	1979		1980		1979	1980	1979		1980	
	Cases	Rate	Cases	Rate	Cases	Cases	Cases	Rate	Cases	Rate
Autauga	2	6.8	9	30.4	5	14	42	141.9	55	185.8
Baldwin	2	2.6	4	5.3	2	7	127	167.1	174	228.9
Barbour	0	0	4	15.8	0	7	62	245.1	136	537.5
Bibb	1	6.7	0	0	2	0	37	248.3	30	201.3
Blount	0	0	0	0	0	0	35	102.0	18	52.5
Bullock	0	0	0	0	0	0	80	689.7	105	905.2
Butler	2	9.2	3	13.8	4	7	67	308.8	46	211.9
Calhoun	5	4.2	15	12.6	7	29	403	339.2	341	287.0
Chambers	0	0	2	5.3	0	7	134	354.5	129	341.3
Cherokee	0	0	0	0	0	1	14	75.7	7	37.8
Chilton	0	0	2	6.7	1	3	52	173.3	62	206.7
Choctaw	1	6.1	1	6.1	1	1	23	139.4	51	309.1
Clarke	1	3.6	1	3.6	2	2	24	86.0	21	75.3
Clay	0	0	0	0	0	0	6	42.3	6	42.3
Cleburne	0	0	0	0	0	0	8	66.1	1	8.3
Coffee	2	5.6	0	0	4	1	79	220.0	128	356.5
Colbert	0	0	0	0	0	0	214	427.1	198	395.2
Conecuh	0	0	1	6.2	0	3	21	130.4	72	447.2
Coosa	0	0	0	0	0	0	4	34.8	10	86.9
Covington	1	2.8	1	2.8	1	4	110	309.9	80	225.4
Crenshaw	0	0	3	20.8	0	4	92	638.9	87	604.2
Cullman	1	1.6	0	0	1	0	62	101.3	55	89.9
Dale	0	0	3	6.2	3	9	68	141.1	40	82.9
Dallas	1	1.8	2	3.7	5	5	1,302	2,402.2	1,380	2,546.2
DeKalb	1	1.9	0	0	1	0	28	54.2	28	54.2
Elmore	3	7.1	7	16.6	3	10	107	254.2	94	223.3
Escambia	0	0	10	27.9	0	12	62	173.2	73	203.9
Etowah	3	3.0	1	1.0	5	7	246	246.7	160	160.5
Fayette	0	0	0	0	0	0	8	47.3	24	142.0
Franklin	0	0	0	0	0	2	33	120.9	51	186.8
Geneva	1	4.1	0	0	3	2	5	20.3	22	89.4
Greene	0	0	0	0	2	2	52	500.0	119	1,144.2
Hale	0	0	1	6.5	2	2	72	470.6	107	699.3
Henry	0	0	2	12.7	1	2	28	177.2	13	82.3
Houston	3	4.1	7	9.6	8	18	564	771.5	553	756.5
Jackson	1	2.0	0	0	1	4	35	68.5	14	27.4
Jefferson	23	3.5	47	9.0	45	95	7,331	1,114.6	6,956	1,057.6
Lamar	0	0	0	0	0	0	18	113.9	7	44.3
Lauderdale	0	0	0	0	1	3	245	314.1	234	300.0
Lawrence	0	0	1	3.3	0	2	41	136.2	40	132.9
Lee	3	4.2	8	11.2	3	19	379	529.3	235	328.2
Limestone	1	2.3	1	2.3	2	2	131	296.4	140	316.7
Lowndes	1	7.2	1	7.2	3	4	641	4,611.5	398	2,863.3
Macon	1	3.8	3	11.2	2	8	218	816.5	213	797.8
Madison	3	1.6	4	2.1	6	11	1,432	759.7	1,047	555.4
Marengo	2	8.5	0	0	9	1	11	46.6	38	161.0
Marion	0	0	0	0	0	0	21	77.5	32	118.1
Marshall	2	3.2	2	3.2	5	3	77	123.2	26	41.6
Mobile	144	39.2	206	56.1	221	314	3,651	993.5	3,349	911.3
Monroe	3	13.0	2	8.7	4	2	19	82.3	30	129.9
Montgomery	56	29.3	59	30.9	110	120	3,846	2,013.6	3,776	1,977.0
Morgan	4	4.6	4	4.6	12	10	336	384.4	255	291.8
Perry	0	0	0	0	1	0	10	73.5	4	29.4
Pickens	0	0	4	18.0	2	8	40	180.2	69	310.8
Pike	0	0	7	25.7	1	21	156	573.5	150	551.5
Randolph	0	0	1	5.3	1	1	24	126.3	27	142.1
Russell	17	36.5	11	23.6	47	29	210	450.6	266	570.8
St. Clair	0	0	0	0	0	1	15	39.8	14	37.1
Shelby	3	4.9	0	0	4	0	112	183.3	90	147.3
Sumter	0	0	0	0	3	0	84	509.1	146	884.8
Talladega	0	0	28	40.2	0	41	263	377.3	191	274.0
Tallapoosa	1	2.8	1	2.7	3	2	39	107.1	28	76.9
Tuscaloosa	2	1.6	6	4.7	9	26	1,510	1,186.2	1,493	1,172.8
Walker	0	0	0	0	1	1	59	87.7	107	158.9
Washington	1	5.5	3	16.0	6	4	3	16.4	8	43.7
Wilcox	3	20.8	0	0	4	0	104	722.2	150	1,041.7
Winston	0	0	0	0	2	0	16	78.8	11	54.2
TOTAL	301	7.9	478	12.6	571	893	25,348	669.4	24,020	634.4

VENEREAL DISEASE MORBIDITY REPORT
(MILITARY EXCLUDED)
1980

Cases reported for the first time during the period

SOURCE OF REPORT	COLOR AND SEX		SYPHILIS					GONORRHEA	CHANCROID	GRANULOMA INGUINALE	LYMPHO-GRANULOMA VENEREUM
			Primary and Secondary	Early Latent	Late and Late Latent	Congenital	Not Stated				
PRIVATE PHYSICIANS	White	111 Male	25	8	4			272			
		112 Female	5	1	5			1101			
	All Other	121 Male	75	27	18	1		952			
		122 Female	38	19	25	1		3211			
		1XX Total,	143	55	52	2		5536			
PUBLIC CLINICS	White	211 Male	21	15	3			1469			
		212 Female	5	6	1			1443			
	All Other	221 Male	202	130	17			8476	1		
		222 Female	107	101	22	1		7096			
		2XX Total,	335	252	43	1		18484	1		
ALL SOURCES (Above)		3XX Total,	478	307	95	3		24020	1		

Age of Congenital Syphilis Cases: Less than 1 __________
1-4 __________
5-9 __________
over 9 __________
Unknown __________

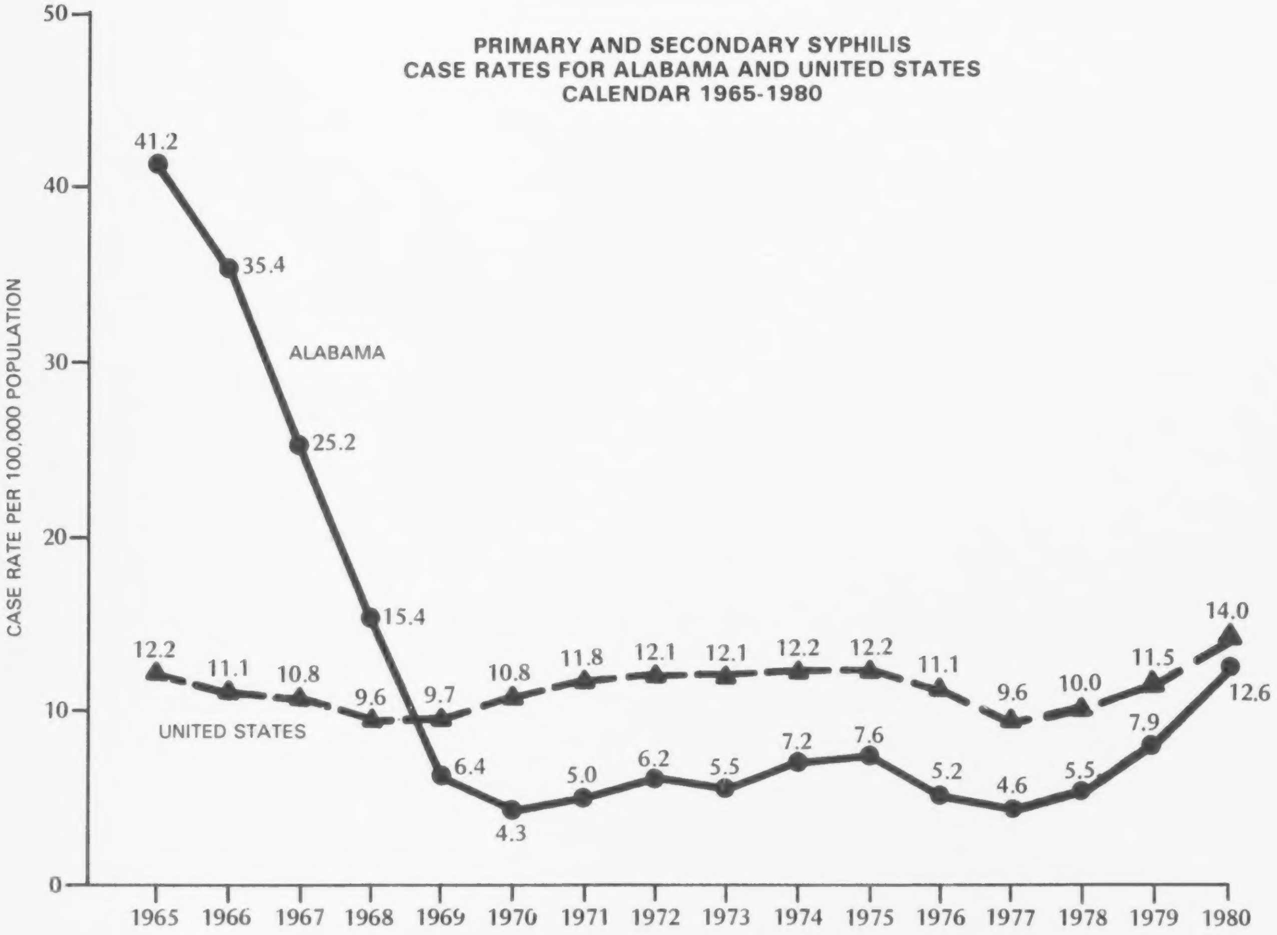
COMPARATIVE PRIMARY AND SECONDARY SYPHILIS RATES PER 100,000 FOR ALABAMA AND UNITED STATES CALENDAR YEARS 1966-1980

Number Cases			Rate Per 100,000	
Alabama	United States	Year	Alabama	United States
1,233	21,414	1966	35.4	11.1
882	21,053	1967	25.2	10.8
541	19,019	1968	15.4	9.6
226	19,438	1969	6.4	9.7
151	21,770	1970	4.3	10.8
175	23,868	1971	5.0	11.8
216	24,932	1972	6.2	12.1
194	25,079	1973	5.5	12.1
254	25,400	1974	7.2	12.2
270	25,713	1975	7.6	12.2
188	23,634	1976	5.2	11.1
164	20,399	1977	4.5	9.6
199	21,656	1978	5.5	10.0
301	25,103	1979	7.9	11.5
478	27,516	1980	12.6	14.0*

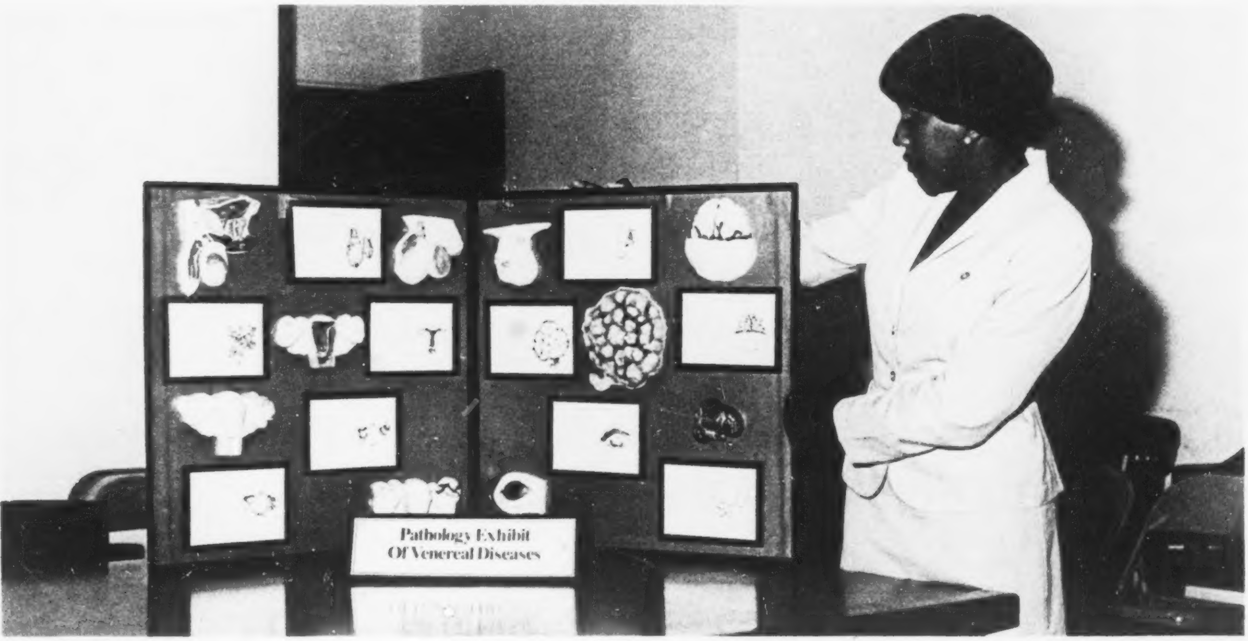
*Estimated

ALABAMA COMPARATIVE SYPHILIS RATES PER 100,000 POPULATION CALENDAR YEARS 1971-1980

Year	Primary and Secondary	Rate Per 100,000	Percent Change	Total Syphilis	Rate Per 100,000	Percent Change
1971	175	5.0	+15.9%	433	12.5	+17.7%
1972	216	6.2	+23.0%	391	11.3	- 9.7%
1973	194	5.5	-10.2%	426	12.2	+ 9.0%
1974	254	7.2	+30.9%	499	14.2	+17.1%
1975	270	7.6	+ 6.3%	527	14.9	+ 5.6%
1976	188	5.2	-30.4%	417	11.7	-20.9%
1977	164	4.5	-12.8%	336	9.4	-24.1%
1978	199	5.5	+21.3%	415	11.6	+23.5%
1979	301	7.9	+51.3%	571	15.1	+37.6%
1980	478	12.6	+58.8	885	23.4	+54.9%



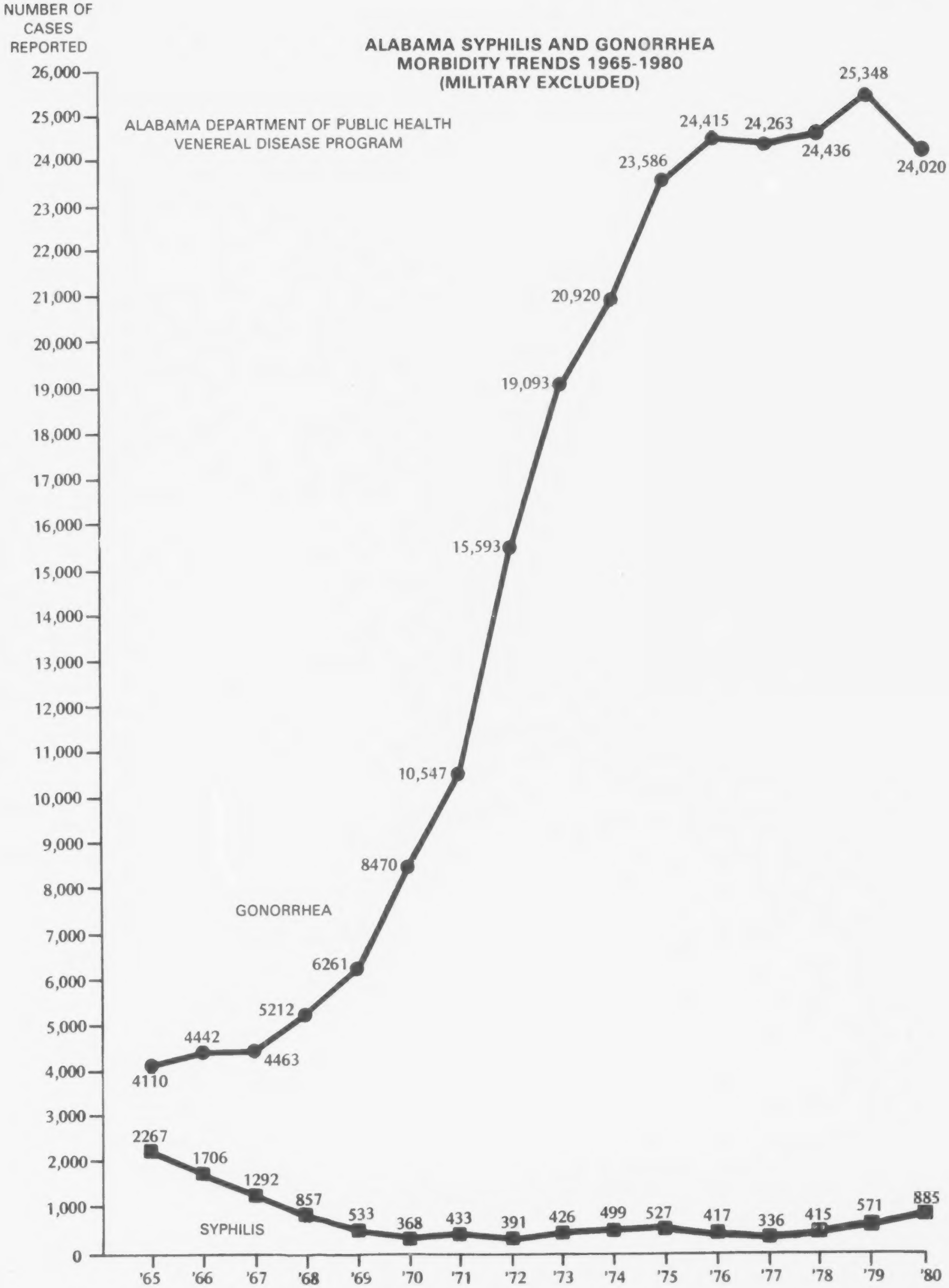
PRIMARY AND SECONDARY SYPHILIS
CASE RATES FOR ALABAMA AND UNITED STATES
CALENDAR 1965-1980



Pathology Exhibit
Of Venereal Diseases

GONORRHEA CULTURE TEST RESULTS OF FEMALES
NUMBER TESTED AND NUMBER POSITIVE BY SOURCE OF TEST (TYPE OF FACILITY/HEALTH PROVIDER)
(EXCLUDE TESTS OF CURE)

PROJECT AREA Alabama		PERIOD COVERED: From January 1, 1980 To Dec. 31, 1980		
SOURCE OF TEST (TYPE FACILITY)	Number Tested	Number Negative	Number Positive	%
1. Health Dept. Non VD Clinics	(84,396)	(80,861)	(3,535)	(4.2)
(a) Family Planning	63,480	60,640	2,840	4.5
(b) Prenatal, OB GYN	16,561	16,011	550	3.3
(c) Cancer Detection	1,497	1,487	10	0.7
(d) Combinations or Other	2,858	2,723	135	4.7
2. Public/Private Hospital-Outpatient	(23,902)	(22,391)	(1,511)	(6.3)
(a) Family Planning				
(b) Prenatal, OB GYN	2,909	2,723	186	6.4
(c) Cancer Detection	14	13	1	7.1
(d) Combinations or Other	20,979	19,655	1,324	6.3
3. Public/Private Hospital-Inpatient	( )	( )	( )	( )
(a) Obstetric				
(b) Gynecologic				
(c) Combinations or Other				
4. Community/Neighborhood Health Centers	(3,995)	(3,693)	(302)	(7.6)
(a) Family Planning	535	495	40	7.5
(b) Prenatal, OB-GYN	17	17		0
(c) Cancer Detection	35	35	0	0
(d) Combinations or Other	3,408	3,146	262	7.7
5. Private Physicians	174,296	171,369	2,927	1.7
6. Private Family Planning Groups	18,653	18,190	463	2.5
7. Group Health Clinics	1,115	1,076	39	3.5
8. Student Health Centers	3,373	3,298	75	2.2
9. Manpower Training Agencies	0	0	0	0
10. Industrial Screening				
11. Military/Dependents	1	0	1	100
12. Correction or Detention Centers	518	500	18	3.5
13. Not Specified				
14. TOTAL NON VD CLINICS	(310,249)	(301,378)	(8,871)	(2.9)
15. Venereal Disease Clinics	(10,278)	(5,757)	(4,521)	(44.0)
(a) Contacts to Gonorrhea	2,154	1,128	1,026	47.6
(b) Syphilis: Contacts/Clusters/Reactors	742	643	99	13.3
(c) Other	7,382	3,986	3,396	46.0
16. GRAND TOTAL	320,527	307,135	13,392	4.18
17. Number Females With Positive Culture Treated For Gonorrhea		▨	13,191	98.5



ALABAMA SYPHILIS AND GONORRHEA MORBIDITY TRENDS 1965-1980 (MILITARY EXCLUDED)

ALABAMA DEPARTMENT OF PUBLIC HEALTH
VENEREAL DISEASE PROGRAM

RESULTS OF FOLLOWUP OF SEROLOGIC REACTORS

TYPE OF LABORATORY	TYPE OF CLOSURE	LINE NUMBER	TOTAL CLOSED	DISPOSITION OF REACTIVE REPORTS				
				DIAGNOSIS				ALL OTHER DISPOSITIONS 5
				PRIMARY OR SECONDARY SYPHILIS 1	EARLY LATENT SYPHILIS 2	OTHER SYPHILIS 3	NOT INFECTED 4	
PRIVATE	Administrative	10	10,267					
	Record Search	11	1,106					
	Voluntary Report	12						
	After Contact With Physician	13	1,491	15	5	154	828	489
	Field Investigation of Patient	14	630	36	26	95	271	202
PUBLIC	Administrative	20	5,586					
	Record Search	21	1,591					
	Voluntary Report	22						
	After Contact With Physician	23	415	9	4	24	296	82
	Field Investigation of Patient	24	752	76	71	76	314	215
FEDERAL	Administrative	30	231					
	Record Search	31	58					
	Voluntary Report	32	1	1				
	After Contact With Physician	33	42	4	1	8	11	18
	Field Investigation of Patient	34	33		1	8	8	16

Administrative Closures

Kinds of Reactors	Number
Weakly Reactive	4,930
Over age 40	8,826
Clinic	1,650
No Name	678
Total	16,084

Number of Reactive Specimens Reported During Report Period

Private Labs	13,519
Public Labs	8,468
Federal Labs	376
TOTAL	22,363

REMARKS:

Laboratory Statistics

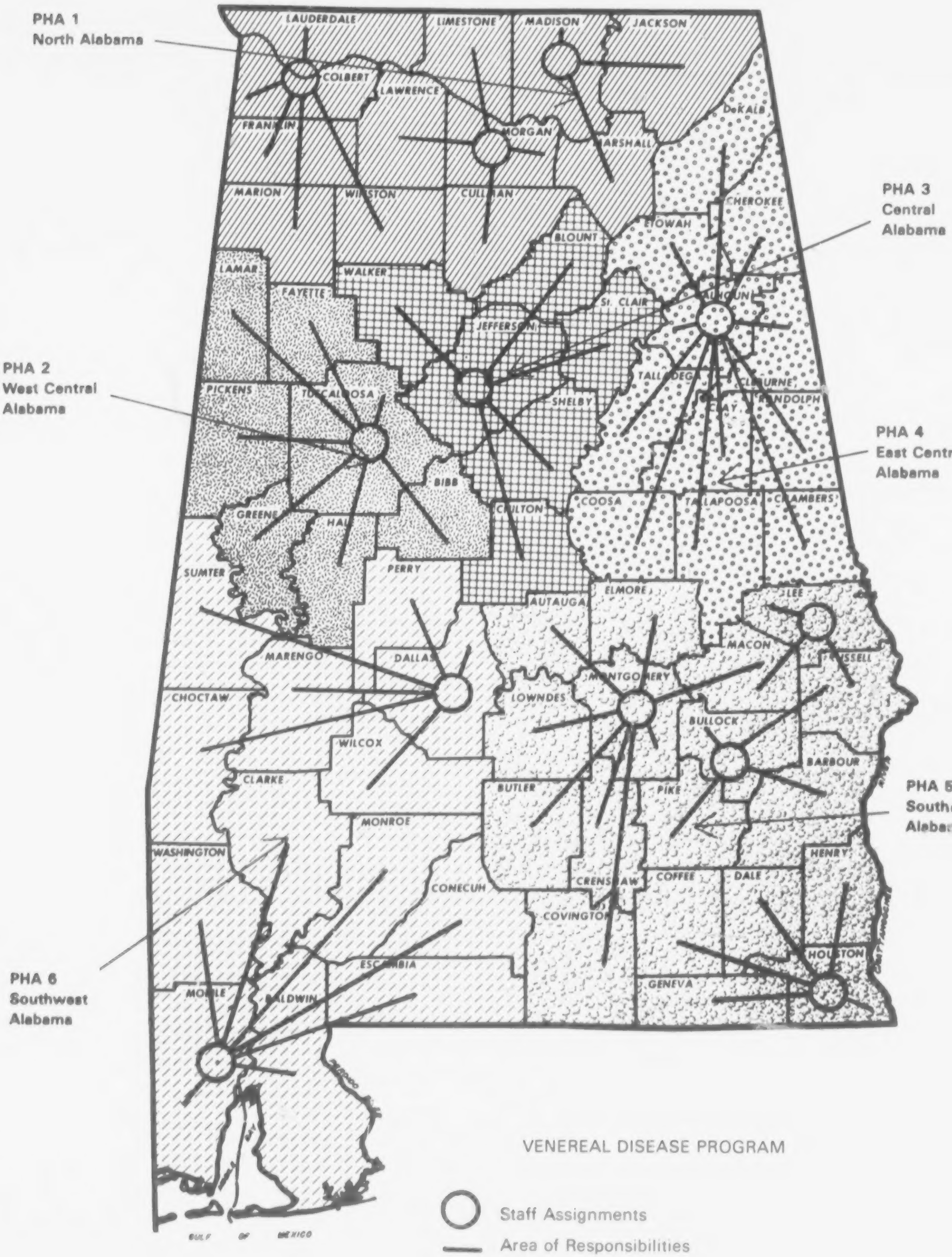
Report Period January 1, 1980-December 31, 1980

Project Number 04-H000136-04-2

Date Prepared February 4, 1981

State or City Alabama

STATE OF ALABAMA PUBLIC HEALTH AREAS


PHA 1
North Alabama
PHA 2
West Central
Alabama
PHA 3
Central
Alabama
PHA 4
East Central
Alabama
PHA 5
Southeast
Alabama
PHA 6
Southwest
Alabama
LAUDERDALE
LIMESTONE
MADISON
JACKSON
COLBERT
LAWRENCE
DeKALB
FRANKLIN
MORGAN
MARSHALL
MARION
WINSTON
CULLMAN
CHEROKEE
ETOWAH
BLOUNT
LAMAR
FAYETTE
WALKER
ST. CLAIR
CALHOUN
JEFFERSON
PICKENS
TUSCALOOSA
TALLADEGA
CLEBURNE
CLAY
RANDOLPH
SHELBY
BIBB
GREENE
HALE
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
SUMTER
PERRY
ELMORE
AUTAUGA
LEE
MACON
RUSSELL
MARENGO
DALLAS
MONTGOMERY
LOWNDES
CHOCTAW
BULLOCK
WILCOX
BARBOUR
CLARKE
BUTLER
PIKE
MONROE
HENRY
WASHINGTON
CONECUH
CRENSHAW
COFFEE
DALE
COVINGTON
ESCAMBIA
HOUSTON
GENEVA
MOBILE
BALDWIN
GULF OF MEXICO
Staff Assignments
Area of Responsibilities

VENEREAL DISEASE PROGRAM

The Bureau of Local Health Services

The mission of the Bureau of Local Health Services has been to coordinate delivery of public health services to the citizens of Alabama by providing general supervision and support to local health departments. This was accomplished by direct administration of the counties without a local health officer, consultation and coordination with counties having health officers, coordination with other State Health Department administrations and bureaus, coordination with other state and local agencies, and consultation services in animal and human health to all local health departments.

The bureau staff consisted of one physician, one public health veterinarian, two administrators and two secretaries.

The year began with 23 counties being served by 11 local medical health officers. Dr. C. P. St. Amant was appointed health officer of Baldwin, Conecuh and Escambia counties on January 2, 1980. During the year Dr. J. B. Stapleton retired, and Dr. Marilyn Crumpton became health officer of Houston County. Dr. James Walker retired from Chambers and Lee counties, and no replacement has been found. At year's end there were 43 counties without a local health officer.

Of the 41 counties without a local health officer in January, eight were also without a local administrator. During the year the administrator of Calhoun County was given the additional assignment of supervising Cleburne County. At the end of the year, 21 administrators were supervising 36 counties; seven counties remained without local administrators.

Much of the effort of the Bureau of Local Health Services has been directed to administrative concerns in the health departments without health officers. Personnel supervision of more than 40 local health departments was a constant challenge—finding and keeping qualified staff and assigning them where they could be most effective. The bureau has upgraded the quality of personnel under its supervision by replacing several nonproductive employees and providing consultation and training to improve the performance of many others.

The bureau has continued to evaluate county programs in these local health departments supervised by administrators. The system was designed to provide the local department and the bureau with organized, detailed information regarding the status of individual public health programs.

In conjunction with program evaluation, the bureau has developed a system to identify approximate program cost and to produce a program budget. It is based upon projected information and utilized as a planning instrument. Revisions and expansion of this system will continue to improve its usefulness.

The bureau has increasingly coordinated efforts with other bureaus and divisions to increase delivery of services and to improve efficiency.

During the year the veterinary public health program has been mainly involved with rabies control and epidemiological liaison with the Division of Epidemiology. Confirmed cases of rabies in animals totaled 56 in 1980. Of major concern has been the release through governmental agencies of human diploid cell rabies vaccine. Physicians and hospitals have been provided this vaccine at cost by the department since early August. Consultation and shipment for the new vaccine are available from professional staff members seven days a week. A 24-hour answering service has been obtained to accommodate weekend and holiday calls.

The local health departments are funded by local money as required by law. This is supplemented by state funds and federal 314d and MCH funds. A total of $5,601,599 was distributed to the local health departments on a formula basis from state and federal funds. This sum added to local support, plus reimbursement for services from third party payers, makes up the revenues available to carry on public health programs. Fiscal management required administrators of the Bureau of Local Health Services to develop or review local budgets, to maintain a commitment from local governing bodies or encourage them to allocate sufficient funds, and to seek out and expand other sources of financial support.

Decisions made during 1980 led to the reorganization of the State Health Department in an effort to provide more medical supervision in Alabama's 67 counties. Each of six public health areas (corresponding with the six health systems areas) will be assigned to the supervision of an assistant state health officer. The Personal Health Services Administration and the Bureau of Local Health Services will cease to exist.

The assistant state health officers will assume responsibility for the programs in their areas including the supervision of program employees. Program directors at the state level will provide consultation and quality assurance.

The assistant state health officers will supervise the local health officers in their areas, will serve as health officer in the counties without local health officers and will continue the efforts to find funds and physicians for additional health officer services.

Bureau of Maternal and Child Health/Family Planning

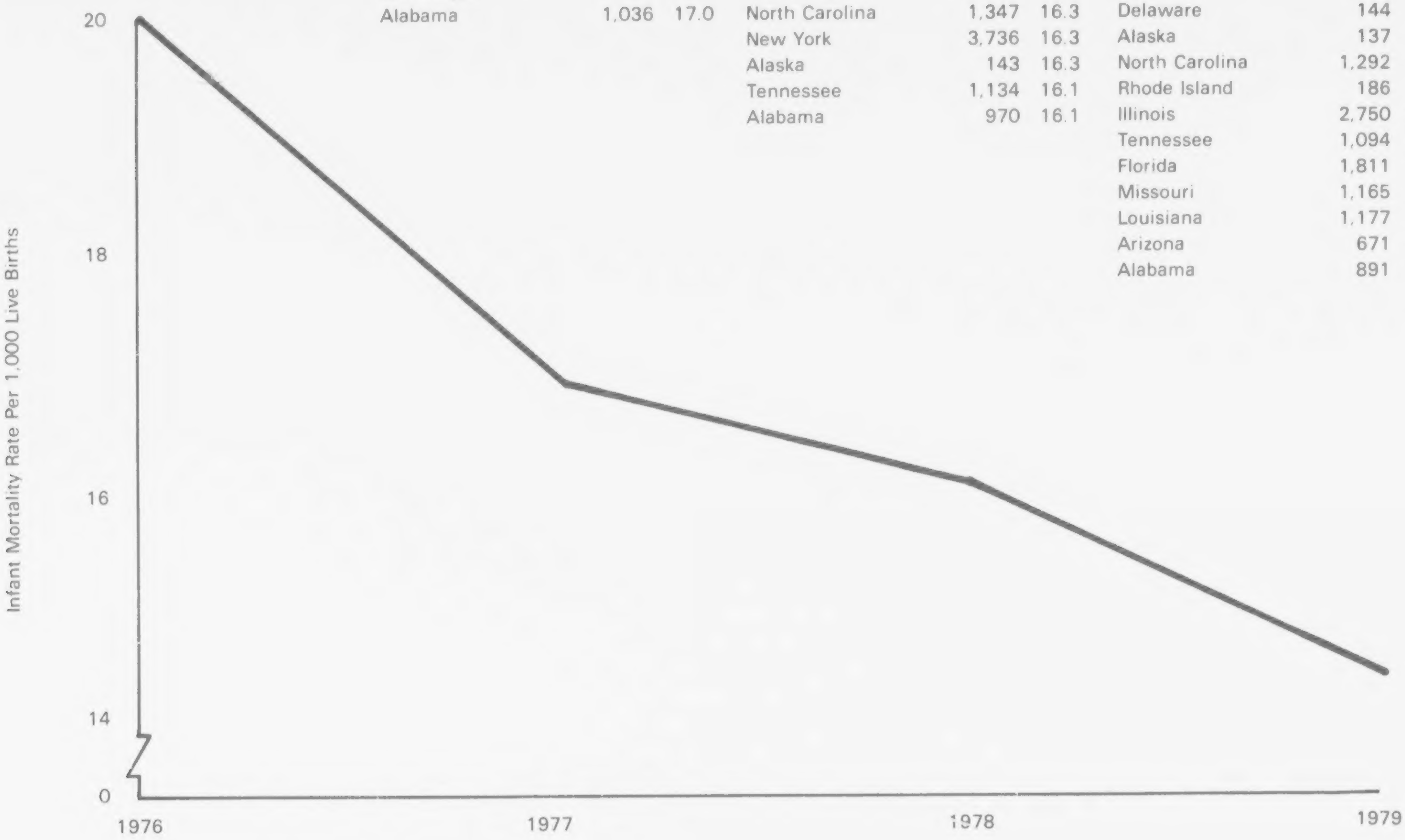
The mission of the Bureau of Maternal and Child Health/Family Planning is to improve the health of women and children in Alabama. Long-range goals related to this mission are the reduction of infant mortality, handicapping conditions in children and teenage pregnancies.

Activities for 1980 included the provision of maternity and infant care services in most of the state's counties; planning, implementation and administration of the bureau's program of projects and a number of other special projects as mandated by Title V, Social Security Act; and the family planning services provided in each county by the Statewide Family Planning Project.

AIDS DIGESTION
BUILDS BONES
always ready to feed
can be cheaper than bottle-feeding

TABLE 1
INFANT MORTALITY IN ALABAMA

1976			1977			1978			1979		
	#	Rate		#	Rate		#	Rate		#	Rate
Dist. of Columbia	478	24.0	Dist. of Columbia	495	23.9	Dist. of Columbia	440	23.1	Dist. of Columbia	392	22.6
Mississippi	889	20.8	Louisiana	1,362	18.0	South Carolina	871	18.5	Mississippi	319	17.8
Alabama	1,134	20.0	South Carolina	856	17.8	Louisiana	1,343	17.8	South Carolina	859	17.2
			Mississippi	784	17.3	Mississippi	778	17.1	New York	3,661	15.8
			Alabama	1,036	17.0	North Carolina	1,347	16.3	Delaware	144	15.8
						New York	3,736	16.3	Alaska	137	15.4
						Alaska	143	16.3	North Carolina	1,292	15.3
						Tennessee	1,134	16.1	Rhode Island	186	15.2
						Alabama	970	16.1	Illinois	2,750	15.2
									Tennessee	1,094	15.1
									Florida	1,811	15.0
									Missouri	1,165	14.8
									Louisiana	1,177	14.8
									Arizona	671	14.7
									Alabama	891	14.3



Within the last four years (Table 1) there has been considerable improvement in the infant mortality rate in the state. From having one of the worst records only five years ago, Alabama now has the second best infant mortality rate of the Southeastern states and has a better infant mortality rate than 14 other states (Table 2). Despite this improvement Alabama still ranked 37th nationwide with an infant mortality rate higher than the national average. It is estimated however that if current preventive measures and medical treatments were accessible to all women and children in Alabama another 300 to 400 infants could survive annually and nearly that many could be saved from becoming permanently handicapped. Table 3 illustrates the

TABLE 2
PROVISIONAL INFANT MORTALITY RATES FOR 1979

District of Columbia	22.6
Mississippi	17.8
South Carolina	17.2
New York	15.8
Delaware	15.8
Alaska	15.4
North Carolina	15.3
Rhode Island	15.2
Illinois	15.2
Tennessee	15.1
Florida	15.0
Missouri	14.8
Louisiana	14.8
Arizona	14.7
Alabama	14.3
Virginia	14.2
Georgia	14.1
West Virginia	13.6
Michigan	13.5
New Mexico	13.5
Pennsylvania	13.3
United States	13.0
Indiana	12.9
Nevada	12.9
Utah	12.8
Arkansas	12.6
North Dakota	12.6
Maryland	12.4
Texas	12.3
Ohio	12.0
New Jersey	11.9
Kentucky	11.8
Nebraska	11.7
Colorado	11.3
Connecticut	11.3
Oklahoma	11.2
California	11.1
Oregon	11.1
Hawaii	10.9
Washington	10.9
Massachusetts	10.5
Kansas	10.4
New Hampshire	10.2
Iowa	10.1
South Dakota	10.0
Minnesota	9.9
Montana	9.8
Maine	9.6
Wyoming	8.9
Idaho	7.8
Wisconsin	7.8
Vermont	7.7

TABLE 3
INFANT MORTALITY
1979

County	No. of Births/ IMR*	No. of Deaths	Expected No. of Deaths**	Excess No. of Deaths**
HSA I				
Colbert	783/15.3	12	8	4
Cullman	865/19.7	17	9	8
Franklin	409/19.6	8	4	4
Jackson	780/12.8	10	8	2
Lauderdale	1,107/14.5	16	11	5
Lawrence	442/27.1	12	4	8
Limestone	667/ 9.0	6	7	-1
Madison	2,938/12.9	38	29	9
Marion	358/14.0	5	4	1
Marshall	896/12.3	11	9	2
Morgan	1,398/10.7	15	14	1
Winston	350/22.9	8	4	4
TOTAL	10,993/14.4	158	111	47
HSA II				
Bibb	232/18.6	2	2	0
Fayette	242/24.8	6	2	4
Greene	216/13.9	3	2	1
Hale	331/27.2	9	3	6
Lamar	218/13.8	3	2	1
Pickens	407/ 9.8	4	4	0
Tuscaloosa	2,070/ 9.7	20	21	-1
TOTAL	3,716/12.6	47	36	11
HSA III				
Blount	466/21.5	10	5	5
Chilton	475/16.8	8	5	3
Jefferson	10,812/13.8	149	108	41
St. Clair	627/ 8.0	5	6	-1
Shelby	1,063/ 8.5	9	11	-2
Walker	1,101/16.3	18	11	7
TOTAL	14,544/13.7	199	146	53
HSA IV				
Calhoun	1,747/15.5	27	17	10
Chambers	547/16.5	9	5	4
Cherokee	242/20.7	5	2	3
Clay	219/13.7	3	2	1
Cleburne	176/ 5.7	1	2	-1
Coosa	169/ 5.9	1	2	-1
DeKalb	811/13.6	11	8	3
Etowah	1,535/14.3	22	15	7
Randolph	298/13.4	4	3	1
Talladega	1,220/13.1	16	12	4
Tallapoosa	574/10.5	6	6	0
TOTAL	7,538/13.9	105	74	31

TABLE 3 (continued)
INFANT MORTALITY
1979

County	No. of Births/ IMR*	No. of Deaths	Expected No. of Deaths**	Excess No. of Deaths**
HSA V				
Autauga	488/16.4	8	5	3
Barbour	405/29.6	12	4	8
Bullock	212/28.3	6	2	4
Butler	409/ 9.8	4	4	0
Coffee	586/17.1	10	6	4
Covington	598/15.1	9	6	3
Crenshaw	210/28.6	6	2	4
Dale	836/19.1	16	8	8
Elmore	719/20.9	15	7	8
Geneva	351/22.8	8	4	4
Henry	262/34.4	9	3	6
Houston	1,280/11.7	15	13	2
Lee	1,047/ 9.6	10	10	0
Lowndes	290/31.0	9	3	6
Macon	405/ 4.9	2	4	-2
Montgomery	3,373/16.0	54	34	20
Pike	463/13.0	6	5	1
Russell	782/17.9	14	8	6
TOTAL	12,716/16.8	213	128	85
HSA VI				
Baldwin	1,259/14.3	18	13	5
Choctaw	292/13.7	4	3	1
Clarke	517/ 9.7	5	5	0
Conecuh	258/ 7.8	2	3	-1
Dallas	1,049/14.3	15	10	5
Escambia	626/19.2	12	6	6
Marengo	448/22.3	10	4	6
Mobile	6,733/10.7	72	67	5
Monroe	461/21.7	10	5	5
Perry	264/18.9	5	3	2
Sumter	338/11.8	4	3	1
Washington	342/17.5	6	3	3
Wilcox	400/15.0	6	4	2
TOTAL	12,987/13.0	169	129	40
STATE	62,494/14.3	891	624	267

*Based on infant mortality per 1,000 live births

**Based on infant mortality rate of 10 per 1,000 live births

excess number of infant deaths in each county in Alabama if Alabama's mortality rate were among the best nationwide.

Teenage pregnancy continues to be one of the major public health problems in Alabama. In 1980 there were 13,048 live births in Alabama to mothers 19 years of age and under. These represent 20.6 percent of all 1980 births in Alabama. In addition there were a considerable, although unknown, number of pregnancies to teenagers which ended in stillbirths, spontaneous miscarriages and therapeutic abortions.

The costs to society of these teenage pregnancies are tremendous. The most recent estimates indicate that each teenage pregnancy costs a state, federal or local government nearly $18,000. The 13,000 teenage pregnancies therefore cost the state of Alabama more than $200,000,000 each year. The health, economic and educational difficulties due to adolescent pregnancy are immeasurable.

Nevertheless, some progress is being made. Table 7 shows that since 1970 there has been a continued reduction in the number of live births and in the birth rate to teenagers. In fact only in the group of teenagers less than 15 years of age has there been an increase in the number of live births.

The Bureau of Maternal and Child Health provides counseling and contraceptive services through the local health departments and other agencies throughout the state. During 1980 the Bureau of Maternal and Child Health/Family Planning provided counseling and contraceptive services to 70,000 persons of which approximately 20,000 were teenagers. Through these services alone an estimated 10,000 teenage births were prevented. In addition the staff of MCH/FP have provided counseling services to nearly 150,000 teenagers during the year in an attempt to promote responsible decisions concerning sexual activity and especially to warn teenagers about the dangers associated with early pregnancy and venereal disease.

During the summer of 1980, representatives from the Alabama Department of Pensions and Security, the Alabama Department of Education, the Office of Rural Health Affairs, the Statewide Parents-Teachers Association, the Alabama Department of Mental Health, the Alabama Medical Services Administration, and the Alabama Department of Youth Services met to discuss activities and plan a strategy for addressing the needs of adolescents in the state, particularly with regard to teen pregnancy. As an outgrowth of these discussions, the Teen Pregnancy Leadership Conference took place December 3, 1980, in Montgomery. In addition to the Mayor of Montgomery, the Governor and numerous legislative and state government officials, there were 600 agency representatives, clergy, school teachers, parents and concerned citizens who participated in a day long conference to discuss what realistic measures could be taken to reduce teenage pregnancy.

TABLE 4
PATIENTS SERVED
FISCAL YEAR 1980

Program	New	Continuing	Total
Area 1	4,239	7,547	11,786
Area 2	1,196	3,241	4,437
Area 3	5,957	15,050	21,007
Area 4	1,969	4,577	6,546
Area 5	5,324	9,655	14,979
Area 6	4,434	9,015	13,449
Statewide	23,119	49,086	72,205

TABLE 5
STATEWIDE FAMILY PLANNING PROJECT
FISCAL YEAR 1980

1. Unduplicated patients served:	
New	23,119
Continuing	49,086
Total	72,205
2. Total patient clinic visits	203,158
3. Teenagers served:	
New	10,019
Continuing	7,547
Total	17,566
4. Teenage groups:	
Under 18	6,665
18-19	10,901
5. Medical services provided patients:	
Pap tests	60,697
Pelvic exams	73,426
Breast exams	60,917
Blood tests	58,339
Urinalysis	66,338
VDRL	60,336
GC	68,746
Blood Pressure	197,254
Sickle Cell tests	12,191
Other	180,508
6. Referrals for medical problems	5,007
7. Patients served who were below 150% of the CSA Poverty Level (96%)	69,317
8. Medicaid patients represent 14.5% of the total caseload for a 2.1% decrease from fiscal year 1979.	
9. Total clinicians visits	104,099
10. 43.3% of all new patients admitted were teens.	
11. 39.4% of all new patients admitted had used no method of contraception prior to enrollment in these clinic programs.	
12. Family planning patients averaged 2.81 visits per patient during fiscal year 1980.	

TABLE 6
STATEWIDE FAMILY PLANNING PROJECT
PATIENT CHARACTERISTICS
FISCAL YEAR 1980

Education		
8 and under	=	9.7%
9-11 years	=	37.1%
12 years	=	38.3%
13+ years	=	14.8%
Unknown	=	0.1%
Parity		
0	=	32.8%
1	=	29.8%
2	=	18.1%
3	=	7.6%
4	=	3.5%
5+	=	3.6%
Unknown	=	4.6%
Race		
White	=	40.7%
Nonwhite	=	59.3%
Contraceptive Method		
Oral	=	82.7%
IUD	=	5.5%
Diaphragm	=	1.3%
Condom	=	1.2%
Foam	=	6.5%
Sterilization	=	0.6%
Other	=	2.2%
Age Groups		
15-17	=	9.2%
18-19	=	15.1%
20-24	=	39.3%
25-29	=	8.7%
30-34	=	8.7%
35+	=	7.6%

Tables 4, 5 and 6 provide an additional summary of services in the family planning program in 1980.

As in 1979 the Bureau of Maternal and Child Health/Family Planning used predominantly federal funds from both formula and competitive grants to finance the Maternal and Child Health/Family Planning activities. These funds provided equipment for health departments and hospitals to use in medical care. To increase and improve services to local populations, training for clinic staff in local health departments was also provided. The revision of goals and objectives was facilitated by the data which were collected and analyzed. Interest groups and communities were educated to the need for and availability of Maternal and Child Health/Family Planning services. Health providers were encouraged to unify efforts which will improve the health of women and infants in Alabama.

For fiscal year 1980 the Bureau of Maternal and Child Health/Family Planning received its funds from three federal sources and one state source. A total of $5,967,340 came from Title V of the Social Security Act for Maternal and Child Health Services; Title X of the Public Health Services Act provided $3,623,510 to support family planning activities in local health departments across the state; $250,000 was allocated to the bureau from the Special Education Trust Fund for education of physicians and nurses working in the area of maternal and child

TABLE 7
TOTAL BIRTHS TO TEENAGERS (15-19 YEARS OF AGE) AND AGE-SPECIFIC BIRTH RATES
1970-1979

Year	Total Births	Alabama Age-Specific Birth Rates	U.S. Age-Specific Birth Rates
1970	15,513	91.1	68.3
1971	15,633	90.4	64.7
1972	15,534	88.5	62.0
1973	15,469	86.8	59.0
1974	15,134	83.7	58.1
1975	14,507	79.0	56.3
1976	13,803	75.9	53.1
1977	13,951	77.4	53.7
1978	13,003	72.5	52.4
1979	13,062	72.1	N/A

health; and finally Section C-330 of the Public Health Services Act provided $240,356.

Of the total Title V money received for 1980, $4,844,200 was allocated to the counties for medical services on a formula basis. The largest portion of this funding is used in support of a federally mandated program of projects.

MATERNAL AND INFANT CARE PROJECTS IN JEFFERSON, MOBILE, MACON, BULLOCK AND RUSSELL COUNTIES—These projects provide prenatal, postpartum and infant care to one year of age for nearly 7,000 women and their infants each year. Hospital delivery is provided for a small percentage of high-risk patients.

CHILDREN AND YOUTH PROJECTS (C&Y)—This funding supports many of the activities of the outpatient department of Children's Hospital as well as substantial inpatient care to indigent children and youth in Jefferson County.

NEWBORN INTENSIVE CARE UNIT PROJECTS—The University of South Alabama and the University of Alabama in Birmingham each received funding which supports a small portion of the cost of newborn intensive care for indigent patients provided by each facility.

DENTAL PROJECTS—The bureau administered funds for projects which provide dental services to indigent children in Mobile and Jefferson counties.

FAMILY PLANNING DEMONSTRATION PROJECTS—This project, located in North Alabama, HSA Area 1, provided family planning services for indigent women. It serves as a demonstration family planning project for the state.

The balance of Title V funds was awarded in support of the projects described below. These projects have durations of four to five years.

THE IMPROVED PREGNANCY OUTCOME PROJECT (IPO)—This is a demonstration project designed to improve pregnancy outcome and to lower infant mortality. The project provides prenatal, postpartum and infant care to indigent women and children in Tuscaloosa, Bibb, Hale, Pickens, Lamar, Greene and Fayette counties. This care was provided in conjunction with the West Alabama District Health Department and the University of Alabama Department of Community Health Sciences. In addition a portion of the IPO funds was used statewide to gather data about maternal and child health, to perform various statewide educational projects, and to provide staff for regional maternal and child health consulting teams.

ALABAMA IMPROVED CHILD HEALTH PROJECTS—There are two improved child health projects in Alabama. The Southeast Alabama ICH Project was implemented in Russell, Macon, Bullock, Pike, Henry and Barbour counties in 1979. The Southwest Alabama ICH Project was implemented in 1980 in Conecuh, Perry, Sumter, Marengo, Wilcox and Monroe counties. The mandate for each is to demonstrate the most effective means of reducing infant mortality and unwanted teenage pregnancies. This funding provided for expanded family planning services; education and outreach services; prenatal, postpartum and infant care; and some delivery services for high-risk mothers.

MENTAL RETARDATION PROJECTS—The Center for Developmental and Learning Disorders in Birmingham and Children's Center of Montgomery received support for services to children who are mentally retarded.

In addition to the funding already mentioned, approximately $2,000,000 supported maternal and child health services through the local health departments, especially those not involved in the special projects discussed previously. In 1980 many counties in the state expanded or began prenatal and well-child clinics funded from this part of the Title V grant. Title X funds supported family planning services statewide.

AREA HEALTH DEPARTMENT CONSULTING PROGRAM—The Bureau of Maternal and Child Health/Family Planning continued to develop its area consulting and coordinating teams which when complete will be made up of an administrator, a health educator, a nutritionist, a social worker and a nurse. In 1980 the bureau moved closer to a full staff in each discipline in each Health System Agency but still has unfilled and unfunded positions. Each team has been an indispensable factor in improving maternal and child health services in its area.

HIGH-RISK OUTPATIENT REFERRAL PROGRAM—In 1979 the Bureau of Maternal and Child Health/Family Planning developed referral mechanisms for local health department maternity patients who could not afford the sophisticated care that complications in pregnancy demand. Centers for referral were identified and full statewide implementation was achieved in 1980.

PERINATAL NURSING AND PHYSICIAN EDUCATION PROGRAM—The Bureau of Maternal and Child Health contracted with the regional perinatal centers to provide educational programs to physicians and other providers, especially in the smaller and more rural hospitals in their area.

EDUCATIONAL MATERIAL DEVELOPMENT—The production of educational materials from the medical educational division at University of Alabama in Birmingham was continued under contract with the bureau. These products are primarily used by Alabama physicians and nurses to improve their care of women and children.

Bureau Administration

During 1980 the Bureau of Maternal and Child Health/Family Planning maintained its organization in which seven general management divisions operate directly under the supervision of the bureau director. This organization was developed in 1979 to increase the effectiveness and efficiency of the bureau with regards to productivity, administrative cost and evaluation techniques. A brief description of each division's responsibility and major activities during 1980 follows.

Division of Data and Analysis

The Division of Data and Analysis maintains and monitors the patient reporting systems for family planning, maternity and pediatrics, and provides training and technical assistance to all clinics concerning the functioning of these systems. Also this division satisfies the needs of the different divisions of Maternal and Child Health/Family Planning for data so that appropriate planning and reporting can be accomplished.

Activities:

1. Developed and finalized the pediatric reporting system.
2. Audited family planning clinics for data consistency and reliability.
3. Audited the "National Sample Reporting System for Family Planning" clinics for their annual review.
4. Provided training for county health department personnel regarding the pediatric reporting system.
5. Revised the data collection instrument for family planning.
6. Developed data publications for the bureau.

Division of Fiscal Management

The Division of Fiscal Management develops budgets and financial plans for the programs of the Bureau of Maternal and Child Health/Family Planning. It maintains financial systems in order to provide accurate and timely expenditure information to program management for decision making, planning and accountability of funds.

Activities:

1. Developed a unified system of financial management for Maternal and Child Health/Family Planning to include a sound financial plan for each county, each region and the state, based upon annual assessments of resources and expenditures.
2. Monitored and provided an ongoing evaluation of the expenditures of all special projects by the end of fiscal year 1980.
3. Developed and maintained an in-house bookkeeping/accounting system of all bureau expenditures.
4. Maintained the family planning fee system and continued to study the feasibility of expanding the system to maternal and child health services.
5. Designed and implemented a statewide supply system for the Bureau of Maternal and Child Health/Family Planning.

Division of Health Education

The Division of Health Education activities in the Bureau of Maternal and Child Health/Family Planning can be divided into five distinct areas:

1. Increasing public awareness of the necessity of appropriate health care;

2. Patient education in clinic sites;
3. Community health education and local resource development;
4. School family life education;
5. Staff training and development.

Activities:

1. Maintained the bureau's resource center and expanded the family planning resource centers into Maternal and Child Health/Family Planning resource centers.
2. Developed community health education projects in three Maternal and Child Health/Family Planning areas and provided assistance in other areas during fiscal year 1980.
3. Compiled, monitored and reported health education contacts during fiscal year 1980.
4. Increased effectiveness of advisory councils through orientation, training, increased consumer participation and consumer recruitment.
5. Implemented statewide media campaigns on teenage pregnancy and infant mortality in fiscal year 1980, and provided technical assistance in the development of local media campaigns.
6. Established a statewide interagency task force regarding adolescent pregnancy.
7. Provided school systems with materials and consultation in family life education in fiscal year 1980.
8. Developed patient education programs and patient education materials in conjunction with the Division of Patient Care.
9. Developed an orientation package for Maternal and Child Health/Family Planning personnel.
10. Developed, implemented and evaluated a training plan for Maternal and Child Health/Family Planning with consultation from the Division of Patient Care based on annual needs assessments during fiscal year 1980.

Division of Patient Care

The Division of Patient Care is responsible for the coordination of clinical services at the local level. This division provides consultation for medical, nursing, nutrition and social work services in the areas of family planning, pediatrics and maternity. Developing, implementing and monitoring of screening protocols as well as protocols for management of problem patients are the responsibility of this division. Consultants in nursing, nutrition and social work act in an advisory capacity to the patient care coordinator to assure that the protocols developed are sound and applicable to the various clinic settings. In cooperation with the Health Education Division, training programs for Maternal and Child Health/Family Planning personnel are developed to promote the use of protocols and encourage high standards of care in clinics.

Activities:

1. Incorporated standard medical records for family planning, maternity and pediatric care into this program.
2. Held in-service meetings on the patient care protocol manuals through area personnel for persons working in Maternal and Child Health/Family Planning Programs.
3. Incorporated the genetic screening questionnaire and the protocol for referral into all programs.
4. Established a central registry and protocols for follow-up for children diagnosed as having phenylketonuria (PKU) and hypothyroidism as well as children born with congenital anomalies.
5. Held a lay midwife conference during which a revised lay midwife manual was distributed. Continuing education was provided for the state's lay midwives, and county nurses were given the opportunity to make plans for their counties' lay midwife programs.
6. Cosponsored a workshop concerning the developmentally delayed child with Crippled Children's Services, the University of Alabama in Birmingham and the University of Kentucky.
7. Expanded training efforts in the area of maternity care. Eight nurses were trained in the Prenatal In-Service Education Program.
8. Enabled four nurses to receive training to become OB/GYN nurse practitioners through the regional training center for family planning.

Division of Planning and Grants

The Division of Planning and Grants is responsible for developing and updating the state plans for maternal and child health and family planning services; searching for additional sources of funding through federal, state and private sources; preparing new and continuation applications which satisfy federal requirements for grant funds to support maternal and child health services; coordinating planning and grant activities with appropriate state and local review authorities; and preparing narrative and statistical reporting data in compliance with federal reporting requirements.

Activities:

1. Completed a plan to incorporate an objective-setting, task-oriented, time-framed approach to management planning.
2. Developed two new funding sources for maternal and child health services in fiscal year 1980. The Appalachian Regional Commission and the Sudden Infant Death Syndrome projects were both approved for fiscal year 1981.
3. Submitted all required plans, narrative reports and other information to federal and state authorities by due dates to maintain project funding.

4. Ensured that Maternal and Child Health/Family Planning projects were consistent with goals and objectives of state and regional review authorities.

Division of Quality Assurance

It is the responsibility of the Division of Quality Assurance to design, implement and monitor a system of quality assurance at local, area and state levels which can be used to evaluate the patient care, staff utilization and productivity, management systems and support systems. The division also is responsible for assisting in designing and implementing efficient and effective systems in all functional areas of the bureau.

Activities:

1. Assisted in the revision, implementation and monitoring of the Maternal and Child Health/Family Planning planning process to assure compliance with federal mandates for quality assurance in Title X and Title V programs.
2. Administered the Alabama Statewide Family Planning Project, including drafting of the continuation application, implementing the review process, reporting requirements, evaluating the program, serving as liaison with the Department of Health and Human Services Region IV, interpreting Title X regulations and requirements and revising budgets.
3. Monitored clinical information systems for compliance with quality standards of care in fulfilling federal reporting requirements for Title X and for evaluation of clinic effectiveness as well as statewide efficiency and productivity quarterly and semiannually.
4. Tested the on-site review tool for complete clinic program evaluation as the final stage of implementation of a system of quality assurance. Final revision of the tool began in December 1980.
5. Began final development stage of the policy and procedure manual for the Bureau of Maternal and Child Health/Family Planning.
6. Represented Alabama at a Tri-Regional Conference (20 states) to share the bureau's system of quality assurance.
7. Provided consultation and technical assistance where indicated.

Division of Support Services

The Division of Support Services is responsible for all contractual negotiations and their related requirements. The relationship between the Bureau of Maternal and Child Health/Family Planning and Medical Services Administration, the fiscal intermediary and the providers of Title XIX services is coordinated by this division. The purchase of major equipment items for health facilities, the negotiations of bureau lease agreements and the development and implementation of a high-risk referral program for indigent maternity referrals are areas of responsibility of this division.

The Division of Support Services is also responsible for the coordination of the statewide perinatal program and the coordination of bureau affiliated employees hired under the Comprehensive Employment Training Act, as well as a linkage with the Division of Internal Audit in the Alabama Department of Public Health.

Activities:

1. Developed, implemented, maintained, and/or renewed all contracts including interagency agreements that are required to facilitate the operation of Maternal and Child Health/Family Planning Programs during fiscal year 1980.
2. Coordinated the implementation of a statewide perinatal program involving six medical facilities and state appropriations of $250,000 in fiscal year 1980.
3. Coordinated eight high-risk referral testing centers providing needed tests/consultations for indigent maternity patients. These centers provided several hundred tests for indigent referrals during fiscal year 1980.
4. Maintained an ongoing inventory of equipment purchased by the Bureau of Maternal and Child Health/Family Planning in fiscal year 1980 both for hospitals and county health departments.
5. Maintained lease agreements for space required for the implementation of Maternal and Child Health/Family Planning Projects during fiscal year 1980.
6. Coordinated activities between the Bureau of Maternal and Child Health/Family Planning, Medical Services Administration and its fiscal intermediary for all county health departments and Title V agencies under formal contract for the provision of prenatal services reimbursable by Title XIX—Medicaid.

Bureau of Public Health Nursing

Division of Home Health Services

The Division of Home Health Services has focused not only on quality assurance in providing services but also on the appropriate documentation for the services.

Since the beginning of the Memorandum of Agreement between the division and the Office of Direct Reimbursement (ODR), Health Care Financing Administration, there have been no denials of payment on these bills submitted to ODR. Under the agreement ODR reimburses for all visits billed, but every six months consultants from Baltimore do a comprehensive random sampling of records to determine if any should be denied. Two such consultative visits resulted in no denial of payment.

The computer billing procedure for both bills and starts of care is working well. This procedure has been recommended by HCFA and consequently representatives from agencies in Mississippi, Tennessee and Virginia have visited regarding starting the system in their agencies. Calls from as far away as Seattle, Washington, and Portland, Oregon, have been received. It is unusual for an agency to have a system for 58 subunits that performs as well as this one does. Data Processing, the Finance Division and the Division of Home Health Services, as well as the Office of Direct Reimbursement, worked very closely together to achieve an excellent system.

Geneva, Covington and Sumter counties completed the term of their expansion grants during this year. All three counties met their objectives and are continuing to increase services. Jackson and Marshall counties have been awarded expansion grants and are in the process of employing personnel.

Division representatives have been involved in hearings regarding Certificate of Need for new agencies.

The area health systems agencies have recommended expansion of existing agencies rather than the establishment of new agencies. There are at least 32 certified private agencies in Alabama in addition to the 58 subunits of the Division of Home Health Services. Most private agencies serve several counties.

HOME HEALTH SERVICES BY DISCIPLINE

		Visits					
Program	Patients Unduplicated	Skilled Nursing	Physical Therapy	Speech Therapy	Home Health Aide	Orderly	Total Visits
Medicare	6,703	66,687	3,832	501	49,224	1,225	121,472
Medicaid from county billing cards	1,692	17,243			25,560	3	43,806
Disease and Disability from A-3	5,269	40,525					40,525
TOTAL	13,664	114,455	3,832	501	75,784	1,228	205,803

Other disciplines providing services in the subunits are:

Physical Therapy		
1 Staff	serving	1 county
Contracts		
1 County Health Dept.	serving	2 counties
15 Individuals	serving	35 counties
3 Rehab Centers	serving	3 counties
1 Hospital	serving	2 counties
1 P.T. and Rehab Service	serving	1 county
		44
Speech Therapy		
5 Individuals	serving	9 counties
2 Rehab Centers	serving	2 counties
1 S. T. Associate	serving	1 county
1 Co. Speech & Hearing Clinic	serving	1 county
1 Univ. Dept. of Speech	serving	1 county
		14
Occupational Therapy		
2 Rehab Centers	serving	2 counties
Orderly		
37 Individuals	serving	32 counties

Home health workshops have been reported by the Division of Planning, Training and Evaluation. In addition personnel from the Division of Home Health Services and the subunits participated in state agency workshops throughout the state sponsored by the Bureau of Licensure and Certification.

Program evaluations were completed in all subunits, and appropriate suggestions or recommendations were made.

Emphasis will continue on quality care; additional efforts will be made to reach those who are in need of home health services.

Division of Planning, Training and Evaluation

The Division of Planning, Training and Evaluation completed the year having met its objectives to provide quality educational programs for public health nurses. The programs were designed to improve the participants' knowledge and skills in the area of nursing and public health. Workshops and seminars were planned and conducted throughout the state in cooperation with program people on epidemiology, tuberculosis, home health, the public health nurses' responsibilities for student nurse experiences and child assessment. Other workshops and seminars for public health nurses were coordinated and promoted through this division of the Bureau of Public Health Nursing.

Individualized orientation was provided for 15 new nursing employees. For the first time one-week formal orientation programs were developed and presented in July, and 30 nurses participated. In 1981 four orientation programs will be offered. A module for preceptorship in public health nursing was developed and will be used in concert with the formal orientation under the direction of the public health nursing consultants.

The public health nurse supervisors' workshop, "Strategies for Supervision," was conducted in December 1980 for the public health nursing directors and supervisors throughout the state.

The Bureau of Public Health Nursing's reference library is being used effectively by public health nurses, hospital nurses, student nurses and lay people. New references and periodicals have been acquired to enhance the efficiency of this library. Information on patient care has been provided to public health nurses from this resource in response to numerous requests.

Pamphlets distributed by the bureau have been revised during this year. The *Policy and Procedure Manual for Public Health Nurses* has been completed and will be distributed in early 1981. All policies and procedures have been revised and updated.

This division worked with the Bureau of Maternal and Child Health/Family Planning in developing the *Maternal and Child Health Manual* and the *Alabama Lay Midwife Manual*.

A slide series has been developed on the *Nursing Bag Technique* to be used in orientation of all new nurses and review for other nurses. The Montgomery County health officer and her nursing staff participated in this project.

Displays for health fairs and career days were on loan to local health department nursing staffs throughout the year.

Members of this division have participated as resource persons and guest speakers in workshops and seminars presented by other groups.

Consultation and coordination with faculty and public health nursing personnel concerning student nurse experiences are an integral part of the division's activities. At the present time, six baccalaureate nursing programs are utilizing public health nursing sites for student field experience.

The year of 1980 has been one in which this division has expanded its activities to meet the increasing demands for more knowledge and skills in the field of nursing and public health.

Staff Development Programs

First Session

Topic: "Spinal Cord Injury Training Program"

Date	Place	Attendance (PHNs)
1/16/80	Sylacauga	17
1/17/80	Auburn	13
1/18/80	Dothan	36
1/25/80	Prattville	24
1/29/80	Tuscumbia	24
1/30/80	Decatur	15
2/01/80	Troy	23
2/12/80	Gadsden	29
2/13/80	Gadsden	19
2/21/80	Monroeville	32
2/22/80	Demopolis	16
2/26/80	Tuscaloosa	10
2/27/80	Tuscaloosa	12

Second Session

Topic: "Spinal Cord Injury Training Program"

Date	Place	Attendance (PHNs)
4/16/80	Sylacauga	10
4/17/80	Auburn	17
4/18/80	Dothan	26
4/25/80	Prattville	17
5/02/80	Troy	18
5/06/80	Tuscumbia	21
5/07/80	Decatur	14
5/13/80	Gadsden	18
5/14/80	Gadsden	15
5/23/80	Demopolis	18
5/27/80	Tuscaloosa	12
5/29/80	Monroeville	29

Third Session

Topic: "Home Health Services" (For PHNs and Secretaries)

Date	Place	Attendance
9/5/80	Dothan	22 PHNs, 6 Secretaries
9/24/80	Sylacauga	14 PHNs, 3 Secretaries
9/25/80	Auburn	17 PHNs, 2 Secretaries
9/26/80	Prattville	24 PHNs, 6 Secretaries
10/9/80	Monroeville	28 PHNs, 9 Secretaries
10/10/80	Demopolis	9 PHNs, 0 Secretaries
10/28/80	Tuscaloosa	16 PHNs, 8 Secretaries
11/5/80	Decatur	11 PHNs, 3 Secretaries
11/14/80	Troy	22 PHNs, 8 Secretaries
11/18/80	Gadsden	18 PHNs, 9 Secretaries
11/19/80	Gadsden	9 PHNs, 2 Secretaries
11/25/80	Tuscumbia	20 PHNs, 3 Secretaries

Health Service Aide Workshops

First Session

Topic: "Coping with the Terminally Ill Patient and Family"

Date	Place	Attendance (Aides)
3/19/80	Anniston	11
3/20/80	Russellville	20
3/21/80	Dothan	16
4/15/80	Grove Hill	14
4/23/80	Gadsden	15
4/24/80	Selma	9
5/16/80	Troy	17
5/21/80	Tuskegee	18
5/21/80	Tuscaloosa	9

Second Session

Topic: "Hypertension"

Date	Place	Attendance (Aides)
10/1/80	Anniston	10
10/2/80	Tuscumbia	20
10/15/80	Tuscaloosa	9
10/22/80	Gadsden	15
10/28/80	Grove Hill	14
10/30/80	Selma	11
11/7/80	Dothan	17
11/19/80	Tuskegee	20
11/21/80	Troy	18

Workshops Sponsored by the Bureau of Public Health Nursing

Date	Place	Attendance
Home Health Mini-Workshops:		
2/6/80	Sylacauga	10 PHNs
2/26/80	Montgomery (MSA)	2 PHNs, 1 Visitor
Epidemiology Seminar:		
3/20/80	Grove Hill	No Record
Public Health Nursing Orientation Program:		
7/14-18/80	Montgomery	14 PHNs
7/21-25/80	Montgomery	16 PHNs
Public Health Nurses' Responsibilities for Student Nurses' Experience		
9/15/80	Tuscumbia	15 PHNs
The Public Health Nursing Supervisors' Workshop		
12/1-3/80	Clanton	65 PHNs

Workshops Coordinated or Promoted Through the Bureau of Public Health Nursing

Epidemiology & Disease Control Workshop:		
1/8-10/80	Montgomery	43 PHNs, 27 Others
Prenatal In-service Education Program (Course):		
2/1/80- 6/30/80	N/A	11 PHNs
Mini-Workshop on Child Assessment:		
2/15/80	Sylacauga	8 PHNs, 3 Others
MCH/FP Clinic Protocol Workshop:		
2/18-19/80	Eufaula	43 PHNs (Others unknown)
Alabama 12th Annual TB Workers' Conference:		
3/27/80	Mobile	26 PHNs, 92 Others
Changing Concepts in Nursing Care of the Developmentally Delayed Child:		
4/29-30/80	Birmingham	Unknown
Nutrition and PKU Update:		
5/5-6/80	Birmingham	No Record
Regional Epidemiology Seminars:		
6/10/80	Dothan	21 PHNs, 20 Others
6/13/80	Tuscaloosa	7 PHNs, 7 Others
6/19/80	Montgomery	33 PHNs, 18 Others
7/9/80	Sylacauga	17 PHNs, 6 Others
7/30/80	Decatur	14 PHNs, 1 Other
7/31/80	Gadsden	8 PHNs, 5 Others

EPSDT Workshops:

6/23/80	Demopolis	No Record
6/23/80	Grove Hill	No Record
6/23/80	Birmingham	11 PHNs, 15 Others (a.m.)
6/23/80	Birmingham	7 PHNs, 13 Others (p.m.)
6/24/80	Prattville	13 PHNs, 13 Others
6/25/80	Auburn	7 PHNs, 7 Others
6/25/80	Sylacauga	7 PHNs, 5 Others
6/25/80	Tuscumbia	No Record
6/25/80	Decatur	No Record
6/26/80	Gadsden	No Record
6/27/80	Dothan	No Record
6/27/80	Troy	No Record

Measurement Workshop:

8/7/80	Montgomery	24 PHNs
8/8/80	Birmingham	14 PHNs

Fourth Annual MCH/FP Workshop:

9/3-5/80	Tuscaloosa	151 PHNs, 155 Others

Lay Midwife Conference:

9/26/80	Montgomery	No Record (25 PHNs Invited)

The Adolescent Pregnancy:

11/1/80	Selma	No Record

Tuberculosis Seminar:

12/5/80	Dothan	27 PHNs

Support Division

The Bureau of Public Health Nursing has continued to emphasize management by objectives and to work with the nursing divisions of the county health departments in setting realistic short-term and long-term goals. Much improvement has been noted as the staff have become more involved in trying to achieve the objectives. The job is much more satisfying when progress can be demonstrated and measured.

Changes in the nursing classification made several promotions at the supervisory level possible. New job descriptions were prepared by all nurses for the job performance study. Professional staff of this bureau were interviewed, and the prepared job descriptions were compared with those in similar classifications.

Currently there are 451 nurses employed under the state merit system. At the local and district levels, there are 397 nurses, and 54 are employed at the state level. Most of those employed at the state level are providing services in local clinics. The employment and separation status for the year is as follows:

Employment	Separations
60 replacements, full-time	
33 new positions, full-time	74 resignations
2 replacements, temporary	6 retirements
1 new position, part-time	1 layoff
96 total nurses employed	81 total separations

It is encouraging to note that there has been an increase in nursing positions from 31 last year to 34 this year and that promotions increased from 19 to 31. If programs are to improve or expand, prepared employees must be available. Employment of qualified nurses is often difficult because, in most areas of the state, public health salaries are not competitive with hospital salaries, and public health nurses are increasingly having to be on call for patient care on weekends. These factors affect recruitment efforts, especially in attempts to employ the better prepared nurse.

In addition to the public health nurses employed under the state merit system, there are 92 registered nurses employed in Jefferson County and 34 registered nurses employed in Mobile County.

One of the most important functions of the bureau is that of orientation of new nurses at the local level. At least 80 percent of the nurses employed have less than the baccalaureate degree in nursing. Therefore they have had no theory of public health nursing or public health administration on which to build performance. Without an in-depth orientation they cannot function at a desirable level. The public health nursing consultant plans and participates in the orientation in the smaller counties where supervisory staff are limited. Consultants plan for this experience with the supervisors in other counties and are responsible for the completion of the orientation guidelines. In 1980 there were 93 nurses employed for whom orientation was planned and implemented.

Consultants made more than 450 visits to county health departments to assist in program integration, coordination, evaluation and other areas of public health nursing practice.

This bureau worked with the Forms Review Committee in trying to reduce duplication and to simplify the number of records used in personal health care services.

This bureau also participated with the Division of Radiological Health in planning the role of the public health nurse in the event of a nuclear emergency.

The bureau has continued to work closely with other bureaus and divisions in order to expedite programs and services.

Twelve baccalaureate programs have requested assistance from the bureau in providing public health nursing experience for students. Because of the number involved, experiences have required innovative planning and the utilization of small county health departments.

Bureau personnel have served as representatives of public health nursing at local, district, state and federal levels. The generalized public health nursing consultant must be knowledgeable and proficient in all areas of public health nursing in order to provide the needed assistance to county health departments.

Forest E. Ludden, Ed. D., M.P.H.

SPECIAL SERVICES ADMINISTRATION

The director of the Special Services Administration continued to supervise two bureaus, serve as state registrar and direct the Bureau of Vital Statistics. One of the major accomplishments during 1980 was a new tracking system as it relates to the balancing of monies received in the Bureau of Vital Statistics. Existing video terminals were replaced and two additional stations were installed when the birth index file was completed. This file now has on-line 5.5 million birth records. The Division of Statistical Services provided additional health data with specialized reports on teenage pregnancy and leading causes of death.

The Bureau of Health Data Systems launched a statewide data capturing, cost containment program. This will provide detailed data on cost-effectiveness including quality and quantity of services throughout the public health system in the state. In addition the total finance computer program was revised to meet the needs of the administrative office, the Division of Finance and the legislature better. Two minicomputers were purchased to implement an immunization tracking program within the county health departments.

A complete assessment was made of all health education literature being produced by each unit of the State Health Department. Many publications were discontinued or revised and, where voids were found, new ones were produced. Two major programs were initiated. They were a risk reduction program financed through the Centers for Disease Control and a child restraint in automobiles program funded by the Office of Highway and Traffic Safety.

The narcotics enforcement program that was initiated in 1965 was terminated. A summary of activities of that program is included under the Bureau of Primary Prevention's annual report.

Bureau of Health Data Systems

The Bureau of Health Data Systems was extremely busy during 1980. The volume of data to be processed increased greatly. The leading contributors to this increase were WIC, cost accounting and implementation of MCH maternity patient accounting. The major indicator of this increase was reflected in the fact that the bureau printed over 69 million lines of data during 1980.

New application development included the MCH maternity system, the cost accounting system for Finance, Radiological Health and the MCH Pediatrics System which will be completed in early 1981. New video terminals were installed in the divisions of Radiological Health and Public Water Supply. Additional terminals were installed in Vital Statistics when all years of birth index records, totalling 5.5 million records, were loaded to the disk file.

A Mohawk Series 21 microcomputer was installed in the Division of Finance. Procedures for handling vouchers were changed to eliminate the data entry function within the bureau. Voucher information is transmitted via telephone line to the computer in health data systems.

During 1980 two minicomputers were ordered, and late in the year one was installed in Autauga County. The minicomputers will be for immunization record keeping. There will be future expansion into other county health departments.

Bureau of Primary Prevention

The Bureau of Primary Prevention in 1980 began implementation of two grants received to initiate health and safety programs in the state. The Office of Highway and Traffic Safety awarded a grant to Primary Prevention for promotion of the use of child restraint devices in automobiles to reduce the number one cause of accidental death to children between the ages of one and five.

The Centers for Disease Control provided a grant to the Health Department to stimulate local intervention projects to reduce the risk of chronic disease by promoting changes in lifestyle activities.

Accident prevention continued to be one of the high priorities for Primary Prevention. The Health Department and the Attorney General's Office are codesignees to the U.S. Consumer Product Safety Commission for activities in the state. The Bureau of Primary Prevention has concentrated its efforts on the health and informational activities connected with product safety.

The Cooperative Education Program continued to provide valuable resources to the Bureau of Primary Prevention while providing work experience to college students.

The Division of Graphic Communication installed new high-speed typesetting equipment to promote the efficiency of preparing publications for the Health Department. The new equipment, which gives a much greater range of typesetting abilities, eliminates a majority of the time-consuming layout work which is necessary with many publications.

Division of Graphic Communication

The Division of Graphic Communication is a service division for the Health Department. It includes printing coordination, typesetting, illustrative arts and photographic services.

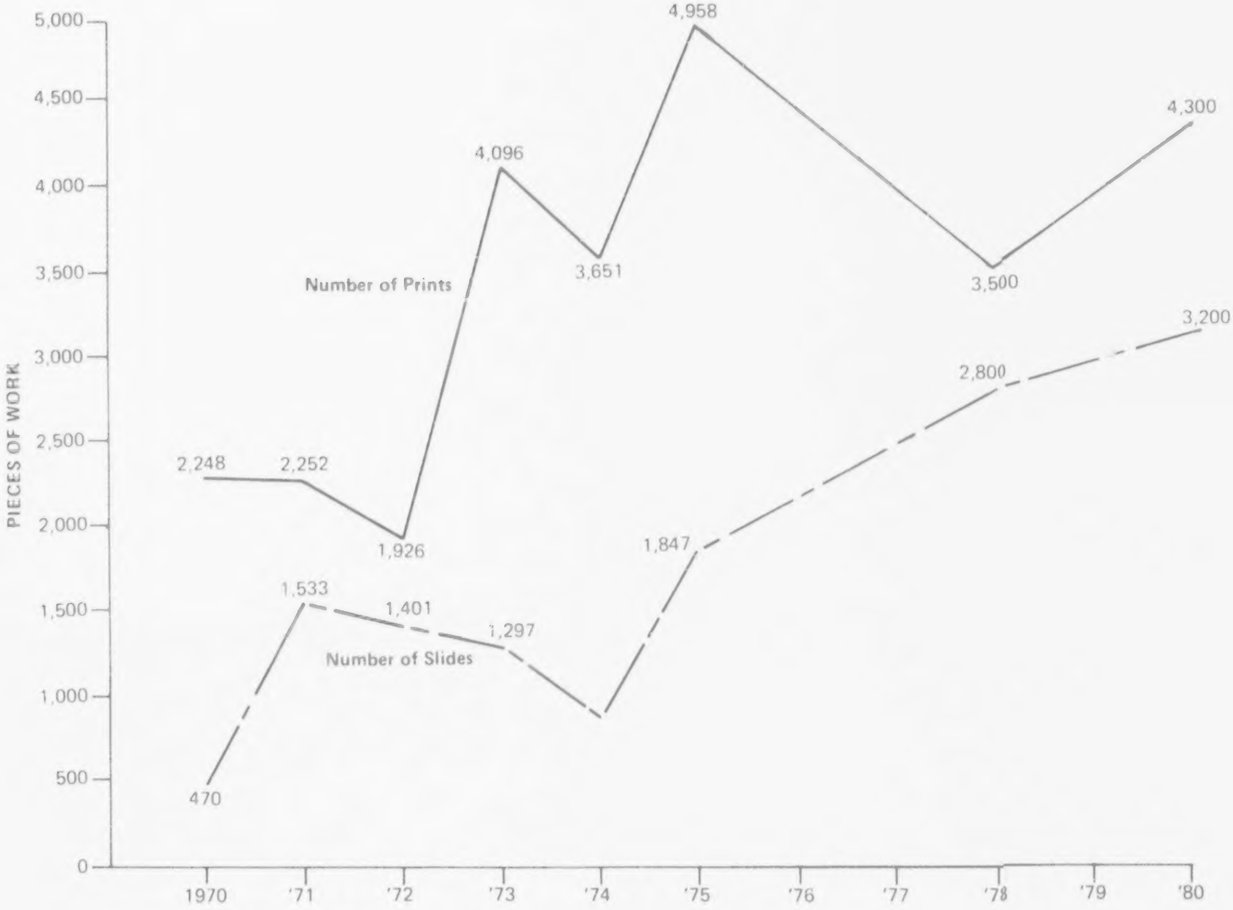
The division coordinated $251,526.50 of printing services consisting of forms, pamphlets and publications totaling approximately 1,500 documents. Printing and Publications returned offset plates and negatives with each order. The plates and negatives were filed to be available for future use.

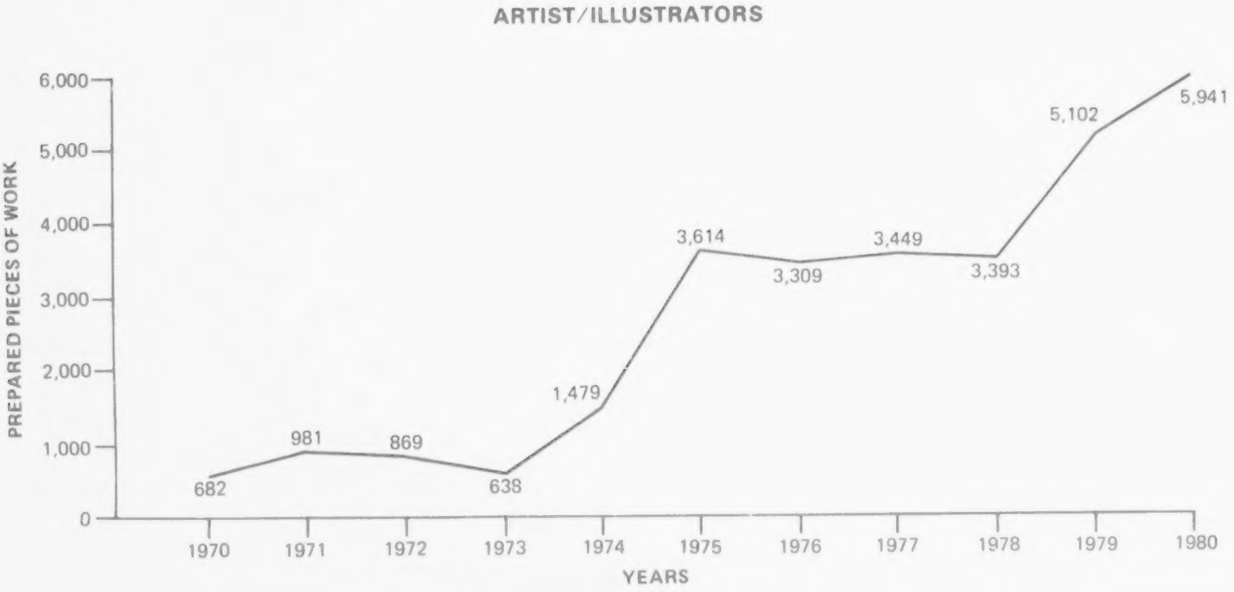
Typesetting services included two calendars; 73 calling cards; 550 certificates; 420 graphs, charts and maps; three covers; 98 brochures; 26 books; 524 forms; nine letterheads; six envelopes; 60 slides; 27 posters; four transparencies; 11 programs; and 68 labels.

Photographic services were furnished to bureaus and divisions and consisted of 3,200 color slides, 4,300 black and white prints of various sizes and 25 color prints in sizes from 8" x 10" to 16" x 20".

Illustrative arts completed 5,941 pieces of work including displays, graphs, slides and charts. The art unit pasted up annual reports, books and brochures and turned out support work for the typesetting unit.

PHOTOGRAPHERS




ARTIST/ILLUSTRATORS

Division of Health Education

The Division of Health Education provides learning experiences which facilitate voluntary adaptation of lifestyles that are conducive to health. The staff inform the public of health and safety hazards, emphasize that wise choices can prolong life, and encourage the avoiding of harmful actions and the forming of beneficial habits. Three projects of the division addressed these concepts last year.

Accidents are the number one cause of death and disability of people between the ages of one and 45. Two of the programs in this division seek to inform the public of the availability of safer options. A third program points out unhealthy lifestyles and seeks to educate the public to choose healthier alternatives.

The Bureau of Primary Prevention received a grant from the Office of Highway and Traffic Safety to promote the use of child restraint devices in automobiles. Traffic accidents are the number one cause of deaths in children between the ages of one and five. During the year several brochures and posters were developed, and approximately 50,000 brochures and 10,000 posters were distributed. Presentations on the importance of child restraint devices were made to hospital and day care personnel, to parenting and prenatal classes and to other interested organizations. Auburn Educational Television worked with division personnel to produce four television and six radio public service announcements for use throughout the state. The response from the media has been excellent and the PSA's are being aired regularly. Surveys to determine the usage of child restraint devices have been made and will continue to be conducted at six-month intervals. These surveys will test the effectiveness of the child restraint program and its impact on parents of infants and young children.

Five years ago Primary Prevention and the Attorney General's Office were designated by the U.S. Consumer Product Safety Commission to be the responsible agencies in Alabama to inform the public about product safety. It is felt that availability of information concerning the purchase and safe use of products can alleviate death and disability of consumers. During the year Primary Prevention staff involved in product safety activities did television interviews on lawnmower safety throughout the state. Public service announcements on lawn equipment safety were sent to electronic media, and news releases on the same subject were sent statewide. Later in the year interviews, news releases and public service announcements were given out on the safe use of fireplaces, stoves and space heaters, as well as on holiday safety. Burn prevention kits consisting of film strips, printed materials and activities were acquired from the U.S. Consumer Product Safety Commission and made available to the public on loan. The kits have been very well received by both educators and students. Presentations on product safety were made during the year to schools, civic organizations and other departments in state government. News releases on recalls of products were sent out during the year. Public service announcements on seasonal topics such as swimming pool safety, home canning and household accidents were also distributed during the year.

Early in the year work was begun on a health education risk-reduction program. The goal of this program is to reduce the risk of premature death and disability from chronic diseases which result from certain lifestyles. One of the elements of this program is to assist communities in establishing, maintaining and improving organized approaches to risk reduction. Personnel from this program have taken part in health fairs and workshops. Another component of this program is the maintaining of a directory of agencies which provide health education-risk reduction services and programs, thus providing more coordination of effort in this area.

The health education resource center combines the film library, the maintenance of audiovisual equipment and the distribution of health promotion materials. These units were combined in order to provide a more efficient means of distributing health information materials to the public.

The film library acquired 82 additional films, bringing to 816 the total number of films and filmstrips in the film library. More than 7,100 requests for films were received and nearly 6,000 films were sent out during 1980. Work was started on a new catalog which will be called *Film and Resource Catalog*. The new publication will include equipment from the audiovisual section; pamphlets, posters and reference materials; displays to be used with health education programs; and films and filmstrips.

Maintaining and distributing equipment for use by Health Department personnel is the job of the audiovisual technician. During the year a total of 601 requests was received for equipment ranging from projectors to extension cords. Of these requests 80 were for 16mm projectors, 68 were for slide projectors, 80 were for overhead projectors and 50 were for screens.

The medical reference library mailed out a total of 384,890 pieces of information and literature concerning the Health Department in response to over 30,000 requests during the year. A new location was found for the library, and planning for the renovation of the space was started.

The Cooperative Education Program has been extremely important both to the participating students and to the Bureau of Primary Prevention. Each quarter two students majoring in communications work with the Division of Health Education and one student majoring in art works with Graphic Communication. During 1980 students wrote articles for *Alabama's Health;* sent out news releases; wrote public service announcements, pamphlets and information cards; and helped compile a directory of health services in the state. The students also developed exhibits for the state fair and worked on surveys for the child restraint program.

The goal of the Division of Health Education is to assist individuals in making informed decisions about health and to motivate them to adopt healthy lifestyles.

Division of Health Information

The task of the Division of Health Information is to keep the public and the health professional informed through the use of the media of the activities within the Health Department, to produce health materials and publications available to the public, to assist through editorial and reference skills other units in the Health Department in preparing health materials and to maintain a schedule of controlled substances.

The Health Department's news magazine, *Alabama's Health,* has a monthly circulation of 3,200. Because of increased interest its size changed from eight to 12 pages this year. A new feature of the magazine is a calendar of events which gives dates for meetings, workshops and other health related activites.

Brochures, information cards and posters are available on a variety of health related subjects. This year there has been an effort to discontinue some of the older or less popular materials. It is felt that this action will accomplish better information material at less cost.

During the year the division provided editorial assistance to other units in the Health Department in the preparation of forms, pamphlets, books, manuals and regulations. The department's annual report was also edited and prepared by the division.

In addition to the activities already mentioned, personnel prepared reports and wrote grants, wrote articles for publication both in *Alabama's Health* and outside publications. They also scheduled and held press conferences and answered inquiries from the public on health and safety matters.

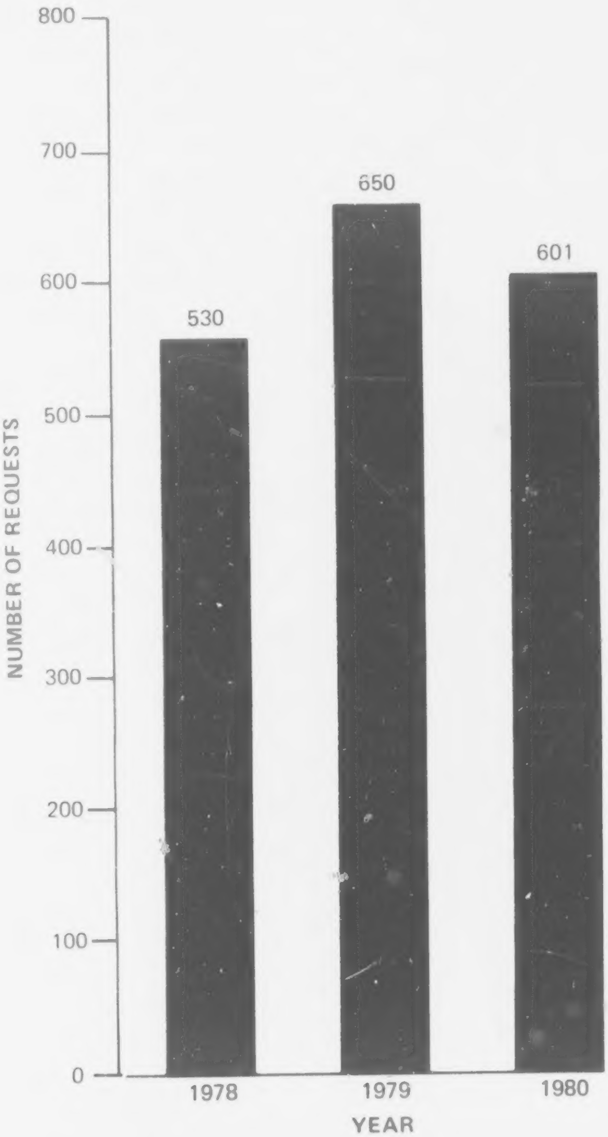
Information specialists in the division wrote speeches, proofed material after it had been typeset and developed posters. The Division of Health Information and the Division of Graphic Communication cooperated in designing the 1981 Health Department calendar.

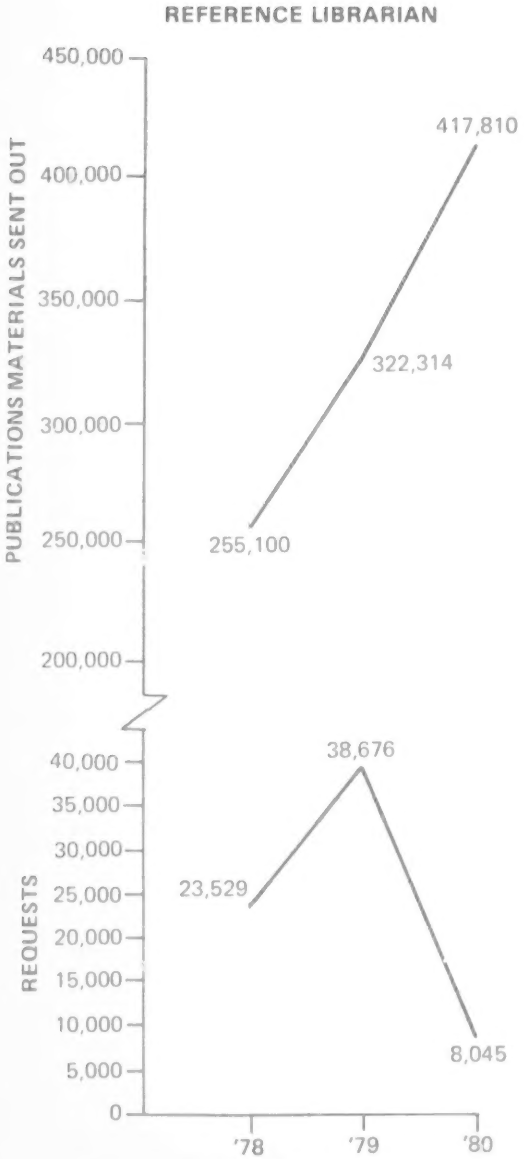
The reference library maintained over 5,000 books and bound periodicals in the department's library. Employees in the library assisted health personnel and the public in locating answers to health related questions and secured health information from other libraries for interested individuals. They also kept an inventory on health materials.

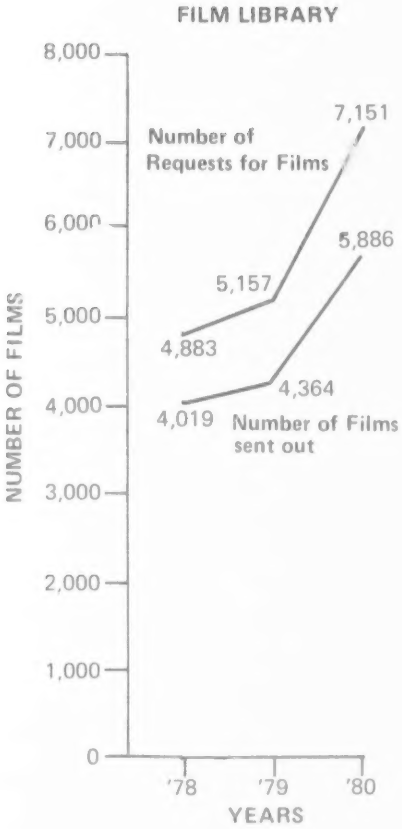
Although the Division of Narcotics and Dangerous Drugs was disbanded, the Division of Health Information continued to maintain the schedule of controlled substances. This report is revised and published annually.

During the year the Division of Health Information provided a variety of services both to health professionals and to the public.

REQUEST FOR AUDIO/VISUAL EQUIPMENT




REFERENCE LIBRARIAN


FILM LIBRARY

Division of Narcotics and Dangerous Drugs

On June 16, 1980, Governor Fob James issued an executive order transferring certain personnel in the Division of Narcotics and Dangerous Drugs to the Department of Public Safety along with agents of the ABC Board to form a concentrated unit within that department.

The division operated in the Health Department from December 1965 until October 1, 1980. There was an average of 3.1 investigators in the field per month over this period of time. Over the years four governors gave $35,700 directly from the Governor's contingency fund to be used for purchasing illegal drugs for court cases in Alabama. The amount of money spent for that purpose was $20,915.74. The total number of investigations conducted was 6,836. During that time 515 persons were convicted in the courts as a direct result of this effort. There were 208 physicians who were denied the privilege of prescribing schedule drugs, and in addition 321 had restrictions placed on what schedule drug they could prescribe.

The State Board of Health still has the statutory responsibility to consider the addicting qualities of all drugs and to place drugs on the scheduled list if evidence presented through hearings justifies the placement. Through the State Health Department, the total drug list is compiled each year and is published in major newspapers throughout the state.

Bureau of Vital Statistics

The Bureau of Vital Statistics is composed of four divisions which carry on the statewide system of registration, preparation, collection, analysis and presentation of data pertaining to births, adoptions, legitimations, deaths, marriages and divorces. Changes and improvements were made during 1980. A major improvement was further computerization. Two additional cathode-ray tubes were installed, providing direct data access to birth index files. Data files for the years 1908-1935 and 1979 were added to the on-line file which now allows index searching capacity for all years of birth records. Changes came in the form of a new fee schedule passed by the legislature in May and implemented July 1, 1980. Fees received in 1980 totaled $872,406.97, an increase of $223,817.08 over 1979.

Divison of Microfilm Services

The Microfilm Division continued to update the birth records by microfilming all 1977 records and placing them into service. All birth records from 1908 through 1977 can now be reproduced from microfilm, a much faster and less expensive method. Delayed birth records, adoptions, legitimations and affidavits were microfilmed throughout the year, thereby expediting the filling of customers' requests.

The project of rebinding vital record volumes slated for completion during 1980 is 80 percent complete. Commitments to other projects have slowed the progress on this project, but it is expected to be completed in early 1981. Approximately 2,575 volumes of births, deaths, marriages and divorces were bound.

During 1980, 63,264 certified copies of vital records were reproduced from microfilm. These copies represented about 26.6 percent of the 237,739 certified copies issued.

Continuing support was given to other departments by the Microfilm Division. Approximately 1,900,000 WIC vouchers were placed on microfilm; therefore the Finance Divison has a security copy of each document. Some departments utilizing the microfilm services were the Engineers and Land Surveyors Board of Registrtion, the Securities Commission, the Water Improvement Commission and the Attorney General's office.

A random sample of the more than 63,400 births that occurred during 1980 was conducted for a special natality study conducted in conjunction with the National Center for Health Statistics.

Division of Record Services

The Division of Record Services has the general responsibility of delivering services concerning vital records to the public. These services include preparing new birth certificates after adoption or legitimation proceedings, issuing a certificate of failure to find record if an event is not recorded, amending vital records and issuing certified copies.

Pieces of mail received, opened, routed and worked during 1980 numbered 192,007, a decrease of 9,281 pieces from the number received in 1979. The decrease was due to discontinuing the notification program in 1979 whereby individual requests for birth certificates were replaced by multiple requests from institutions.

Turnaround time for filling customers' requests was kept to a minimum. A request received on an application form was usually mailed out the third day, while requests that had to be transcribed to a fee form usually required two additional days to be processed.

A backlog did not accumulate in the searching section as had been usual in prior years. Requests for vital records were steady all year rather than all coming in during the summer months. Use of the video terminals helped as did the shifting of personnel to keep the searching current.

New birth certificates were prepared for 3,167 persons who were born in Alabama and adopted, an increase of 932 over last year. This increase was mainly due to the fact that new certificates had not previously been prepared without the required fee. It was decided that new certificates would be prepared upon receipt of the final decree of adoption. All 1980 adoptions are current, and many of those pending since 1976 have been completed.

Certificates of birth were prepared for 1,399 persons born in another state or country and adopted in Alabama. The increase of 826 over 1979 was due mainly to the completion of those being held for receipt of the required fee. It was decided that these would also be completed upon receipt of the final decree. A total of 4,566 new certificates of birth was prepared for adopted persons in 1980 for a total increase of 1,758 from 1979.

New birth certificates were prepared for 1,999 individuals who were legitimated. This increase of 86 over 1979 was unexpected as legitimations have become more complex and require much correspondence and court action before new certificates can be prepared.

Amendments numbering 11,472 were accepted on birth records. The 1,024 more than in 1979 resulted partly from the acceptance of amendments from the Jefferson County Health Department. Another reason was the discontinuing of the notification program whereby a parent could correct an infant's birth record up to the age of one year. Death amendments numbered 124, an increase of 7 over 1979; marriage amendments numbered 33, a decrease of 19. A total of 11,629 amendments was accepted on vital records during 1980.

Certified copies issued on requests by mail numbered 188,324. Copies issued at the service counter numbered 49,415 for a total of 237,739 certified copies issued.

RECAP OF RECORD SERVICE ACTIVITIES

Legitimations:	1,999	increase of 86
Court Legitimations Pending:	400	
Adoptions:		
Alabama	3,167	increase of 932
Out-of-state	1,399	increase of 826
TOTAL	4,566	net increase of 1,758
Amendments:		
Births	11,472	increase of 1,024
Deaths	124	increase of 108
Marriages	33	decrease of 19
TOTAL	11,629	net increase of 1,113
Certified Copies:		
Issued by Mail	188,324	
Issued at Service Counter	49,415	
TOTAL	237,739	decrease of 12,160
Fees Received:	$872,406.97	increase of $223,817.08

Work studies were completed on designated desks during 1980, and this resulted in more efficient methods being employed to facilitate the work load.

Division of Registration Services

The Division of Registration Services, whose primary duty is to receive and check all original vital records from the counties, took on its first full year of processing current requests from hospitals for certified copies of birth certificates. This new duty, created by an act of the 1979 legislature, resulted in the issuance of more than 33,000 certified copies and involved the tendering of more than $129,000. The Division of Registration Services also processed nearly 8,000 current requests for certified copies of death certificates, worked on almost 11,000 delayed birth files and actually filed over 4,000 delayed birth certificates.

The field program continued to emphasize the complete, accurate and timely filing of vital records. During 1980 the program involved more than 17,000 miles of travel throughout the state, necessitated by visits to 78 local registrars, 41 hospitals, 40 physicians, 17 funeral directors, nine district attorneys, six probate judges, two coroners and one sheriff.

During the past year the field representative reported several physicians to the State Board of Health for failing to file certificates of birth and death. One particular case resulted in legal action in which the physician was found guilty. Legal action was also brought against a funeral director for failing to file death certificates, burial receipts and monthly reports of burials. He was found guilty on all counts.

In-service education contributed greatly to continual improvements in the registration of vital events. Two one-day seminars, conducted for registrars, coroners and medical records personnel, focused on solutions to various problems encountered at the local level. In addition several seminars were presented to medical records groups.

Completeness in registration was enhanced in 1980 when a feasible method was developed to follow up every reported birth, death and fetal death. By incorporating this method into the field program, it has been possible to ensure that a record has been filed for every known event.

Division of Statistical Services

Furnishing current information to data users is a top priority of the Statistical Services Division. As the demand for prevalent data increases, more emphasis is being placed on the dissemination of data as quickly as possible.

The Bureau of Vital Statistics is currently in the second year of a three-year contract with the Cooperative Health Statistics System of the Department of Health and Human Services. Under this contract the bureau will promote voluntary cooperation among data users at all levels of government for developing a current and accurate health data base. An additional contract with the Department of Health and Human Services requires the bureau to furnish the National Center for Health Statistics with data tapes of all deaths to Alabama residents for use in the National Death Index.

Due to the demand for data on teenage pregnancies, a report on statistics on births to teenagers was published in 1980 for the first time. This document was in addition to the vital events, natality and mortality reports that are prepared each year.

The Division of Statistical Services is responsible for the coding of all certificates, the preparation of all statistical reports on vital events for distribution to data users and the analysis of those data.

The 1980 census has been used as the basis for adjusting the estimated population for recent years.

Consequently the rates which are based on population have been adjusted.

BIRTHS—For the second consecutive year the number and rate of births in Alabama increased. The crude birth rate of 16.3 per 1,000 population is slightly above the 16.2 adjusted rate for 1979. The 63,405 births which occurred to Alabama residents in 1980 are 911 more than the previous year. In fact there were more births than in any year since 1971.

DEATHS—The general mortality rate also increased during the year. The 35,305 deaths in Alabama in 1980 resulted in a crude mortality rate of 9.0 per 1,000 population—up from the 8.7 adjusted rate for 1979. These deaths are an increase of 1,803 over the previous year.

The ranking of the ten leading causes of death remained unchanged from the previous year.

Heart diseases continued to be the leading cause of death to Alabama residents with an increase in both number and rate occurring during 1980. A rate of 302.6 per 100,000 population resulted from the 11,807 heart disease deaths. The leading cause of death in Alabama for over 50 years has been diseases of the heart.

Malignant neoplasms continued to be the second leading cause of death to Alabama residents with an increase of 512 in number. The 7,024 deaths attributed to cancer resulted in a mortality rate of 180.0 per 100,000 population.

As the third leading cause of death in 1980, cerebrovascular diseases caused the death of 3,465 Alabamians. These deaths were 9.8 percent of all deaths for the year. The 1980 cerebrovascular disease mortality rate was 88.8 per 100,000 population.

Alabama's 2,295 deaths from accidents in 1980 is an increase of 134 over the number in 1979. The accidental mortality rate of 58.5 per 100,000 population is slightly higher than the 57.1 adjusted rate for 1979.

INFANT AND FETAL MORTALITY—The final number of infant deaths and the infant mortality rate for 1980 increased from the 1979 figures. The 960 infant deaths for 1980 resulted in an infant mortality rate of 15.1 per 1,000 live births, compared to 891 and 14.3 respectively for 1979. An increase in the neonatal mortality rate (9.8 for 1980) also occurred with neonatal deaths increasing from 582 to 623.

The number of fetal deaths escalated in 1980 to 723, a numerical increase of nearly 10 percent. The fetal mortality rate of 11.4 per 1,000 live births was higher than the 10.5 rate of 1979 despite an increase in the number of live births.

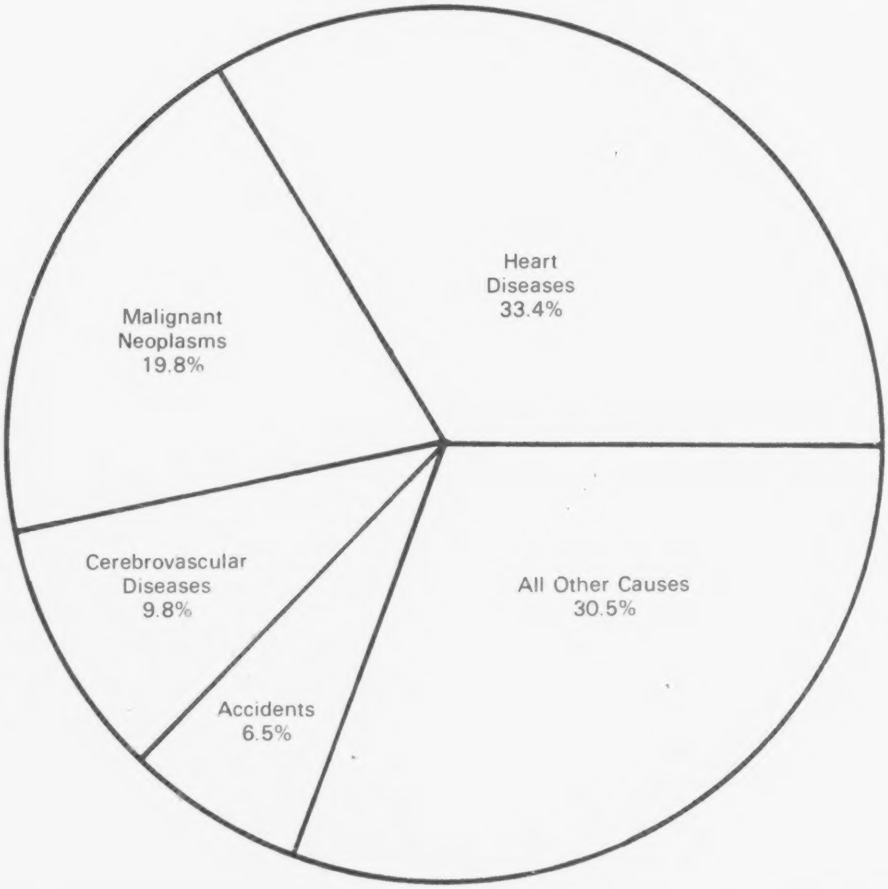
MATERNAL MORTALITY—Eight mothers died from complications of childbirth, labor and puerperium during the year. The one less maternal death in 1980 contributed to the slight decrease in rate to 1.3 per 10,000 live births.

MARRIAGES AND DIVORCES—There were 275 fewer marriages during 1980 than in the previous year. The 49,018 marriages resulted in a rate of 12.6 per 1,000 population. The adjusted marriage rate is also 12.6 for 1979.

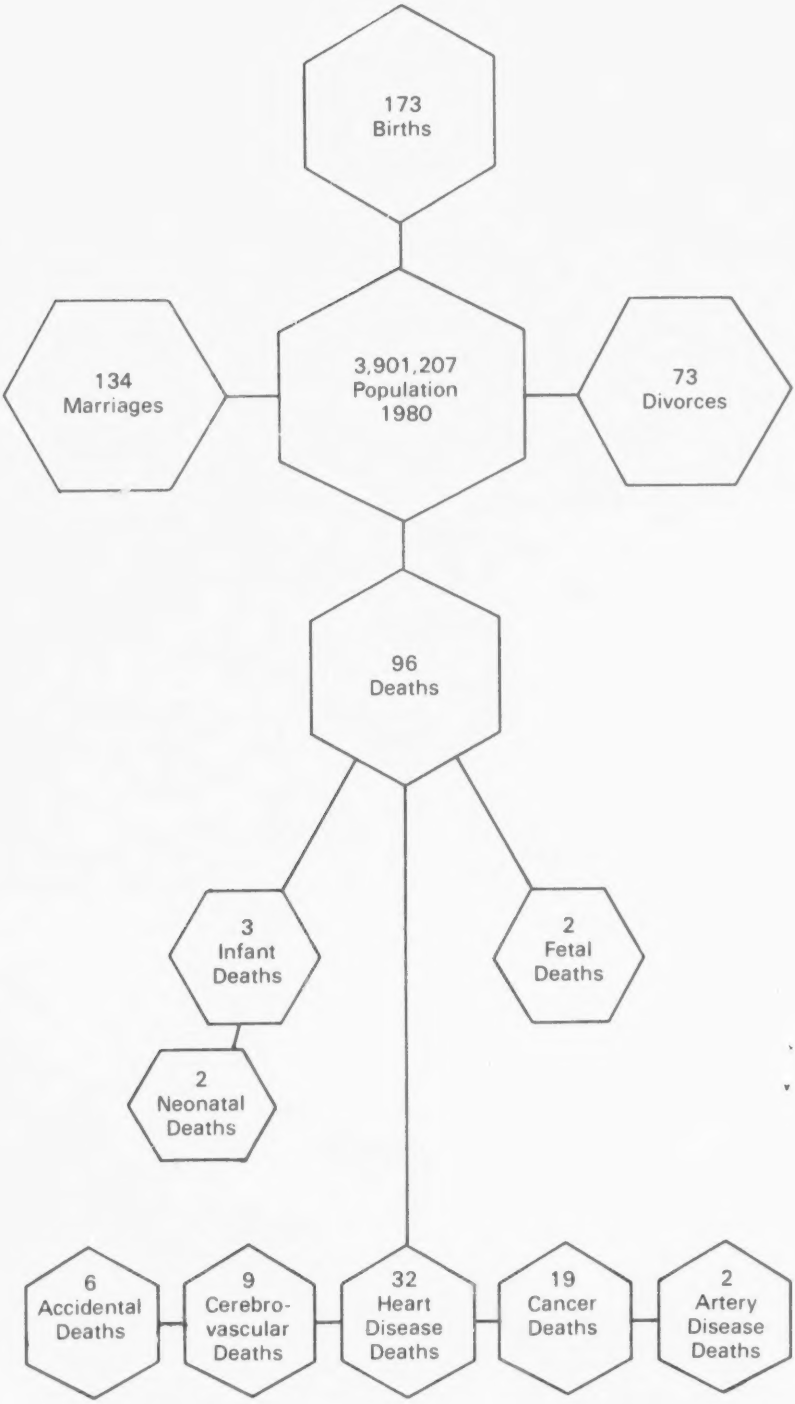
Divorces continued to increase. The 26,745 divorces occurring in Alabama during 1980 represent a numerical increase of 196. However, the divorce rate remained the same as that of the previous year—6.9 per 1,000 population.

POPULATION—Based on data from the 1980 census, Alabama's estimated midyear 1980 population was 3,901,207. It has been estimated that about 75 percent of the population was white and that there were more females than males in Alabama. The sex ratio remained about the same as in 1979—106 females per 100 males.

PERCENT DISTRIBUTION OF MAJOR CAUSES OF DEATH ALABAMA, 1980



EACH DAY DURING 1980 ALABAMA AVERAGED APPROXIMATELY


173
Births
134
Marriages
3,901,207
Population
1980
73
Divorces
96
Deaths
3
Infant
Deaths
2
Fetal
Deaths
2
Neonatal
Deaths
6
Accidental
Deaths
9
Cerebro-
vascular
Deaths
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Disease
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Cancer
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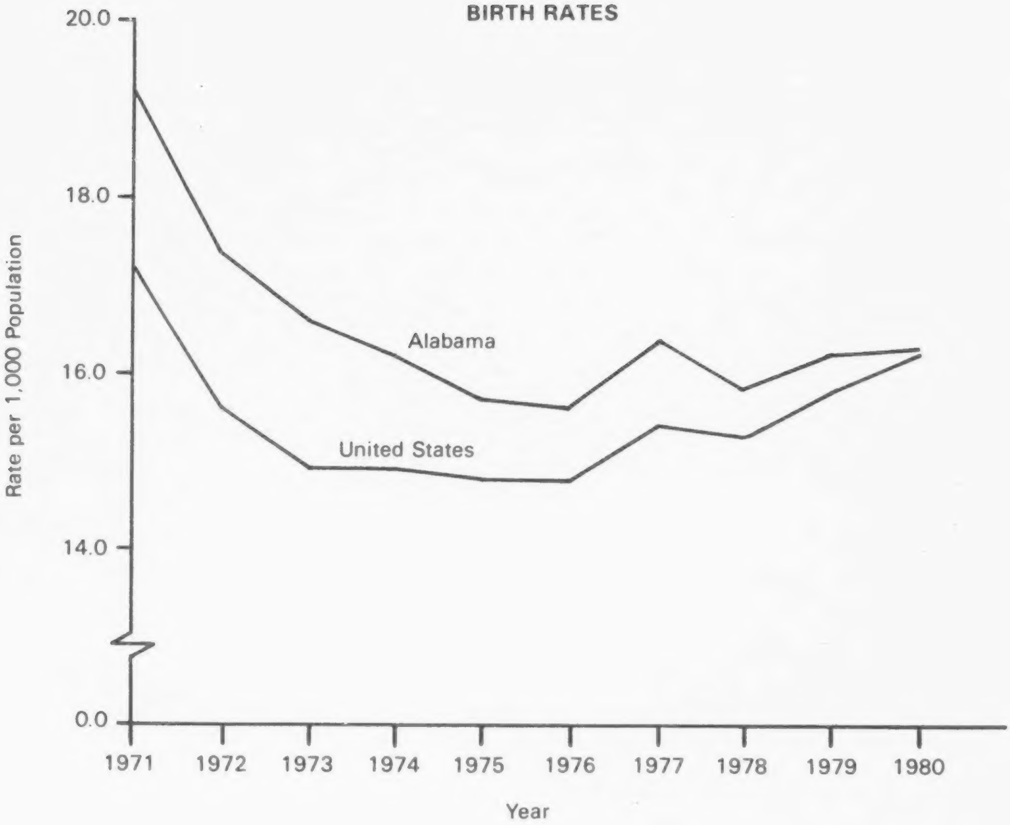
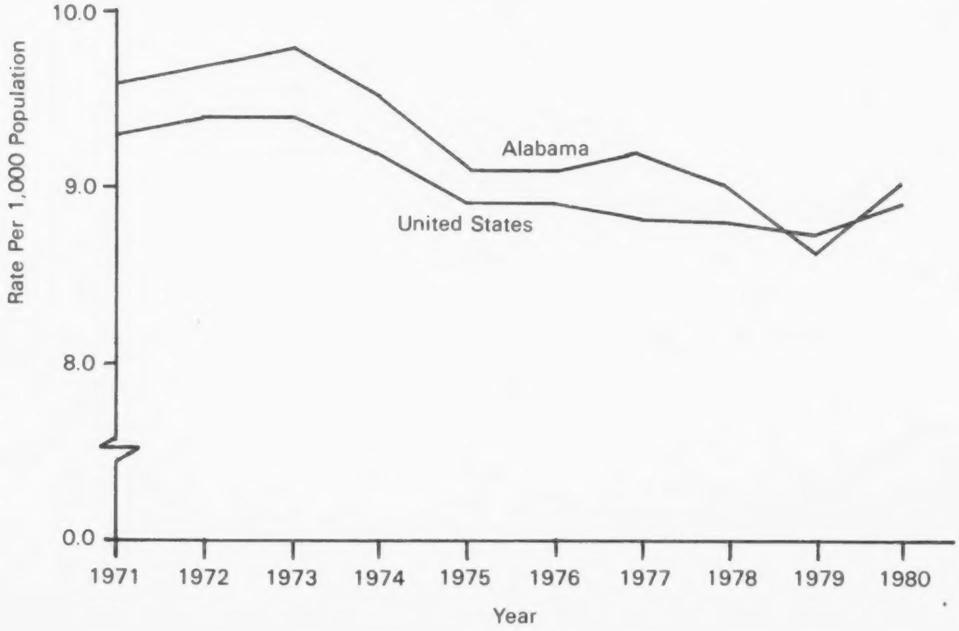
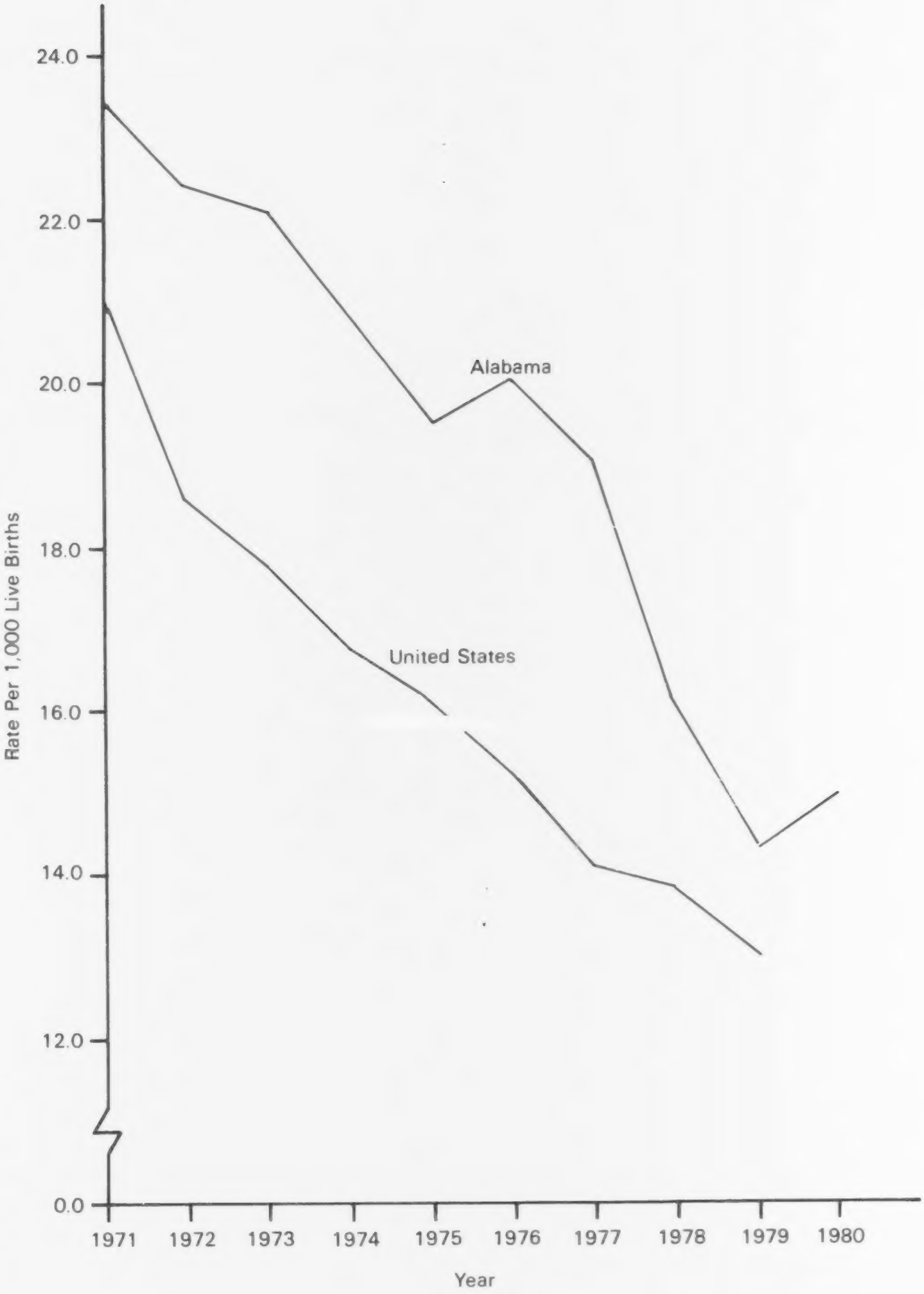
2
Artery
Disease
Deaths


BIRTH RATES

MORTALITY RATES



INFANT MORTALITY RATES



LEADING CAUSES OF DEATH
ALABAMA, 1979 and 1980

1980				1979		
Rank	Number	Rate	Cause of Death	Rank	Number	Rate
—	35,305	904.9	Total all Causes	—	33,502	868.6
1	11,807	302.6	Diseases of the Heart	1	11,470	297.4
2	7,024	180.0	Malignant Neoplasms	2	6,512	168.9
3	3,465	88.8	Cerebrovascular Diseases	3	3,487	90.4
4	2,295	58.8	Accidents	4	2,161	56.0
5	881	22.6	Chronic Obstructive Pulmonary Diseases & Allied Causes	5	857	22.2
6	757	19.4	Pneumonia and Influenza	8	639	16.6
7	726	18.6	Diseases of the Arteries	6	690	17.9
8	664	17.0	Diabetes Mellitus	7	645	16.7
9	614	15.7	Homicide	9	531	13.8
10	484	12.4	Certain Conditions Originating in the Perinatal Period	10	451	11.7
—	6,588	—	All Other Causes	—	6,059	—

Rate per 100,000 population

ASSISTANT STATE HEALTH OFFICERS, LOCAL HEALTH OFFICERS & HEALTH SERVICES ADMINISTRATORS

County/District	Name	Title	Tel. No.	Mailing Address
PUBLIC HEALTH AREA #1				
	Betty W. Vaughan, M.D.	ASHO	353-7021	Box 1628, Decatur 35601
NORTHWEST AL REGIONAL HEALTH DEPT.			383-1231	Box 30, Tuscumbia 35674
Colbert	H. C. Woodworth, M.D.	DHO	383-1231	Box 30, Tuscumbia 35674
Franklin	H. C. Woodworth, M.D.	DHO	332-2700	Box 100, Russellville 35653
Lauderdale	H. C. Woodworth, M.D.	DHO	764-7453	Box 1036, Florence 35630
TRI-COUNTY DIST. HEALTH SERVICES			353-7021	Box 1628, Decatur 35601
Cullman	Betty W. Vaughan, M.D.	DHO	739-3530	305 N. 4th Ave., N.E., Cullman 35055
Lawrence	Betty W. Vaughan, M.D.	DHO	974-1141	Box 308, Moulton 35650
Limestone	Betty W. Vaughan, M.D.	DHO	232-3200	Box 932, Athens 35611
Morgan	Betty W. Vaughan, M.D.	DHO	353-7021	Box 1628, Decatur 35601
Jackson	Lyle Haas	HSA	259-4161	Box 398, Scottsboro 35768
Madison	Lawrence L. Robey, M.D.	LHO	539-3711	Box 425, Huntsville 35804
Marion			921-3118	Box 158, Hamilton 35570
Marshall	Lyle Haas	HSA	582-3174	275 Gunter Ave., Guntersville 35976
Winston			489-5396	Box 57, Double Springs 35553
PUBLIC HEALTH AREA #2				
	E. Kenneth Aycock, M.D.	ASHO	345-4131	1101 Jackson Ave., Tuscaloosa 35401
WEST AL DISTRICT HEALTH DEPT.			345-4131	1101 Jackson Ave., Tuscaloosa 35401
Bibb	E. Kenneth Aycock, M.D.	DHO	926-9702	105 Church St., Centreville 35042
Greene	E. Kenneth Aycock, M.D.	DHO	372-9361	Box 269, Eutaw 35462
Lamar	E. Kenneth Aycock, M.D.	DHO	695-9195	Box 548, Vernon 35592
Pickens	E. Kenneth Aycock, M.D.	DHO	367-8174	Box 192, Carrollton 35447
Tuscaloosa	E. Kenneth Aycock, M.D.	DHO	345-4131	1101 Jackson Ave., Tuscaloosa 35401
Fayette			932-5260	Box 351, Fayette 35555
Hale	J. P. Chism, Ed.D.	HSA	624-3018	Box 87, Greensboro 36744
PUBLIC HEALTH AREA #3				
	William L. Roper, M.D.	ASHO	933-9110	Box 2646, Birmingham 35202
Blount	Frank Banks	HSA	274-2120	Box 96, Oneonta 35121
Chilton	Ron Stutts, Acting	HSA	755-1287	Box 147, Clanton 35045
Jefferson	William L. Roper, M.D.	LHO	933-9110	Box 2646, Birmingham 35202
St. Clair	Frank Banks	HSA	338-3357	Box 627, Pell City 35125
Shelby	Ron Stutts, Acting	HSA	669-2171	Box 976, Columbiana 35051
Walker	Frank Banks	HSA	221-9775	Box 690, Jasper 35501
PUBLIC HEALTH AREA #4				
	Robert J. Henderson, M.D.	ASHO	236-3274	Box 488, Anniston 36202
Calhoun	John Screws	HSA	237-7523	Box 488, Anniston 36202
Chambers	Walter Pack	HSA	864-8834	Box 319, LaFayette 36862
Cherokee	Jim C. Russell	HSA	927-3132	Box 176, Centre 35960
Clay	Perry Bryant		354-2181	Box 325, Ashland 36251
Cleburne	John Screws	HSA	463-2296	Box 36, Heflin 36264
Coosa	Perry Bryant		377-2244	Box 235, Rockford 35136
DeKalb	Jim C. Russell	HSA	845-1931	Box 347, Fort Payne 35967
Etowah	Jean Foster	HSA	547-6311	Box 555, Gadsden 35902
Randolph			863-8981	527 Price St., Roanoke 36274
Talladega	Perry Bryant	HSA	362-2593	Box 1012, Talladega 35160
Tallapoosa			825-9203	Box 125, Dadeville 36853
PUBLIC HEALTH AREA #5				
	Joyce Gendzwill, M.D.	ASHO	832-3376	State Office Bldg., Room 900, Montgomery 36130
Autauga	Bobby H. Bryan	HSA	365-3349	Box G, Prattville 36067
Barbour	Russell Killingsworth	HSA	775-8324	Box 217, Clayton 36016
Bullock	Ron Wheeler	HSA	738-3030	Drawer 430, Union Springs 36089
Butler	Ziba Anderson	HSA	382-3154	Box 339, Greenville 36037
Coffee	Kenneth Ball	HSA	347-9574	Box 98, Enterprise 36330
Covington	Ziba Anderson	HSA	222-1175	Box 186, Andalusia 36420
Crenshaw	Ron Wheeler	HSA	335-3401	Box 326, Luverne 36049
Dale	Charles Oliver	HSA	774-5146	Box 397, Ozark 36360
Elmore	Bobby H. Bryan	HSA	567-5171	Box 316, Wetumpka 36092
Geneva	Kenneth Ball	HSA	684-2257	Box 386, Geneva 36340
Henry	Russell Killingsworth	HSA	585-2660	Box 86, Abbeville 36310
Houston	Marilyn E. Crumpton, M.D.	LHO	793-6404	Drawer 2087, Dothan 36302
Lee			745-5765	Box 2207, Opelika 36801
Lowndes	Virginia Little	HSA	548-2161	Box 35, Hayneville 36040
Macon	Walter Pack	HSA	727-1800	Box 27, Tuskegee 36083
Montgomery	Mary G. Dorrough, M.D.	LHO	263-6671	Box 4008, Montgomery 36195
Pike	Ron Wheeler	HSA	566-2860	Box 425, Troy 36081
Russell	Ron Wheeler	HSA	297-0251	Box 548, Phenix City 36867
PUBLIC HEALTH AREA #6				
	VACANT	ASHO		
	Tom N. Phillips	HSA	832-3186	State Office Bldg., Room 307, Montgomery 36130
GULF COAST DISTRICT HEALTH DEPT.			937-9561	Box 150, Bay Minette 36507
Baldwin	C. P. St. Amant, Jr., M.D.	DHO	937-9561	Box 150, Bay Minette 36507
Conecuh	C. P. St. Amant, Jr., M.D.	DHO	578-1952	Box 208, Evergreen 36401
Escambia	C. P. St. Amant, Jr., M.D.	DHO	867-5765	Box 66, Brewton 36426
Choctaw	Richard Jayne, Acting	HSA	459-2494	214 W. Church St., Butler 36904
Clarke	Bill Coleman	HSA	275-3772	Box 477, Grove Hill 36451
Dallas	S. D. Waldrop, M.D.	LHO	875-4401	Box K, Selma 36701
Marengo	Charles Shields	HSA	295-4205	Box 454, Linden 36748
Mobile	Alfred R. Stumpe, M.D.	LHO	690-8101	Box 2867, Mobile 36652
Monroe	Virginia Little	HSA	575-3109	Box 609, Monroeville 36460
Perry	J. P. Chism, Ed.D.	HSA	683-6153	Box 119, Marion 36756
Sumter	Thomas C. Stuart	HSA	652-7972	Drawer 340, Livingston 35470
Washington	Bill Coleman	HSA	847-2245	Box 417, Chatom 36518
Wilcox	S. D. Waldrop, M.D.	LHO	682-4515	Box 27, Camden 36726

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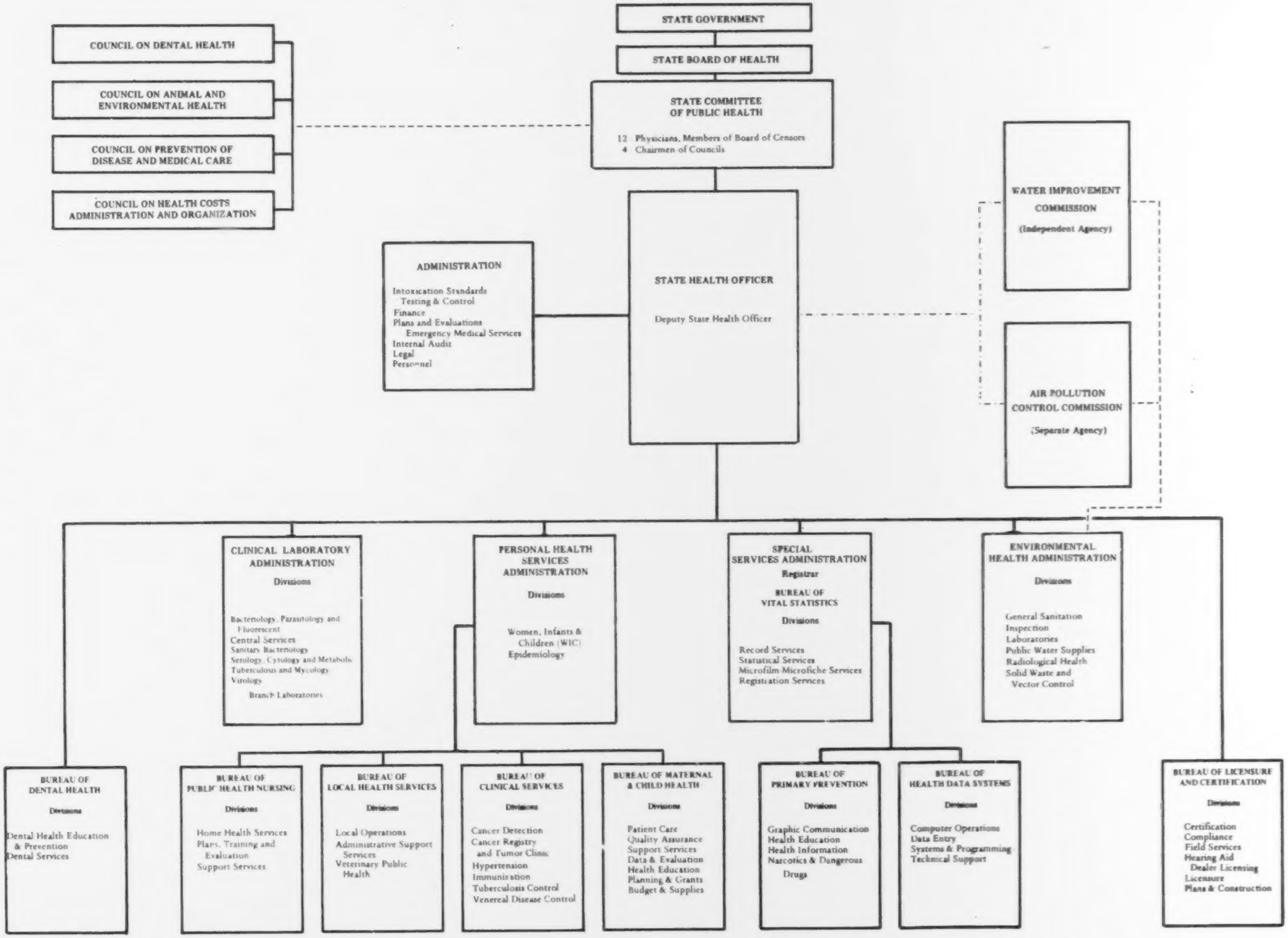
STATE GOVERNMENT
STATE BOARD OF HEALTH
STATE COMMITTEE OF PUBLIC HEALTH
12 Physicians, Members of Board of Censors
4 Chairmen of Councils
COUNCIL ON DENTAL HEALTH
COUNCIL ON ANIMAL AND ENVIRONMENTAL HEALTH
COUNCIL ON PREVENTION OF DISEASE AND MEDICAL CARE
COUNCIL ON HEALTH COSTS ADMINISTRATION AND ORGANIZATION
ADMINISTRATION
Intoxication Standards Testing & Control
Finance
Plans and Evaluations
Emergency Medical Services
Internal Audit
Legal
Personnel
STATE HEALTH OFFICER
Deputy State Health Officer
WATER IMPROVEMENT COMMISSION
(Independent Agency)
AIR POLLUTION CONTROL COMMISSION
(Separate Agency)
CLINICAL LABORATORY ADMINISTRATION
Divisions
Bacteriology, Parasitology and Fluorescent
Central Services
Sanitary Bacteriology
Serology, Cytology and Metabolic
Tuberculosis and Mycology
Virology
Branch Laboratories
PERSONAL HEALTH SERVICES ADMINISTRATION
Divisions
Women, Infants & Children (WIC)
Epidemiology
SPECIAL SERVICES ADMINISTRATION
Registrar
BUREAU OF VITAL STATISTICS
Divisions
Record Services
Statistical Services
Microfilm Microfiche Services
Registration Services
ENVIRONMENTAL HEALTH ADMINISTRATION
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General Sanitation
Inspection
Laboratories
Public Water Supplies
Radiological Health
Solid Waste and Vector Control
BUREAU OF DENTAL HEALTH
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Dental Services
BUREAU OF PUBLIC HEALTH NURSING
Divisions
Home Health Services
Plans, Training and Evaluation
Support Services
BUREAU OF LOCAL HEALTH SERVICES
Divisions
Local Operations
Administrative Support Services
Veterinary Public Health
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Cancer Registry and Tumor Clinic
Hypertension
Immunization
Tuberculosis Control
Venereal Disease Control
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Planning & Grants
Budget & Supplies
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Divisions
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Health Information
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BUREAU OF HEALTH DATA SYSTEMS
Divisions
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Data Entry
Systems & Programming
Technical Support
BUREAU OF LICENSURE AND CERTIFICATION
Divisions
Certification
Compliance
Field Services
Hearing Aid Dealer Licensing
Licensure
Plans & Construction

Administrative Relationship ————————
Chairmanship Relationship — · — · — · — · —
Advisory Relationship - - - - - - - - - - - -

Approved Ira L. Myers
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Prepared by
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